

Intro: Bulletproof Radio: A State of High Performance.

Dave: You're listening to Bulletproof Radio with Dave Asprey.

Today's guest is none other than Dr. Frank Lipman. For almost four decades, he's been a pioneer in integrative and functional medicine. A well-known international speaker in the health and wellness industry, you might have seen him on TV lots of times or in popular magazines, and you probably have heard him if you're interested in health, and you're online.

He's the founder and director of Eleven Eleven Wellness Center in New York City. A multiple times, New York Times bestselling author, and he made something called Be Well a lifestyle brand with cleanses and supplements and health coaching.

I wanted to have him on the show today to talk about his fifth book which is called How to Be Well. It's a very different book than the other ones he's written. He learned a few things while writing it that I'm going to ask him to share on the show today. He's also going to talk about his good medicine mandala, and why really good health comes from the ordinary things you do every day. Something he and I agree on very much.

Dr. Lipman, welcome to the show.

Frank: Thanks, Dave. Thanks for having me.

Dave: I've been wanting to have you on for quite a while, and we finally made our calendars line up which is a fantastic opportunity. Let's open up by just talking about how you got to be one of those rare people who spent decades doing, I'm just going to call it crazy pants medicine for lack of a better word. In that you're doing functional medicine, integrative medicine, the stuff that in my experience really works, and that I wish I discovered earlier. But you were one of the first people to that game. What made you pay attention when most of the medical profession was saying, "Hey, have some more antibiotics"?

Frank: Well, I was lucky enough in a way to grow up in South Africa. I grew up in the '60s and '70s in South Africa during apartheid, so during apartheid being a white person knowing the system was wrong, I was brought up not to trust the system anyway. Then I went into medical school, and I became a doctor. Soon after I finished my training, I realized the limitations of Western medicine.

Maybe because of my upbringing and not trusting the system, I didn't trust the medical system either. It was just an extension in a way of the political system in South Africa. I always question the system.

To be quite honest, when you train as a doctor, you learn crisis care or emergency care. As a doctor, you learn in the hospitals, so you learn how do you treat really sick people. When you come out of the hospital setting, and you're in a practice, people come in,

and they can't poop, and they're tired, and they can't sleep. You're not really trained to treat those people.

I was also lucky enough to work in a practice straight after my medical school where people ... It was an alternative practice in Johannesburg, and people had seen an acupuncturist, and they were getting better. They'd seen a homeopath and had gotten better. All this quackery that I was taught, or modalities I was taught were quackery. People were coming in, and they were being helped with problems that I couldn't help, or I didn't know what to do as a regular doctor.

It was pretty obvious early on that if I really wanted to help my patients, I would have to explore modalities other than what I got taught as a Western doctor.

Dave: You didn't experience the crisis of consciousness or crisis of identity a lot of doctors go through. If you, say, had been maybe trained in the U.S. during that time, in the '70s and '80s, and then you had said, "Wait a minute, acupuncture and homeopathy appear to have clinical results, but they can't have clinical results. Therefore, all the training I've had is no good." You didn't have that level of discomfort, because you didn't really trust it in the first place.

Frank: Yeah, not at all, I didn't ... Exactly, I never had any of that actually.

Dave: Okay. That explains why you were early to the party, because you realized the party might not be entirely accurate even when you were going through the training.

Frank: Exactly, and when I came to the States, I had to do an internal medicine training. I had to do three years in the South Bronx in internal medicine just to get a license in New York. There happened to be an acupuncture clinic attached to the hospital, because they were doing detox. This was the '80s now, crack and heroin were major epidemics. Actually, there happened to be an acupuncture clinic in the South Bronx.

When I was so disillusioned with Western medicine, especially American medicine, because it was even worse than South African medicine, because there was no aspect of relationship. It was all about doing bloods and presenting to the professor. There was no teaching of relationship, so I was really disillusioned.

I went to the acupuncture clinic, and I saw acupuncture working, and I fell in love with acupuncture, so I was living two lives as a resident. I was going to the acupuncture clinic and seeing people getting better for the problems that I talked about earlier. They couldn't poop, and they were tired.

In the hospital, I was seeing people getting better with acute heart attacks and broken bones and acute appendicitis. I saw it. It was so obvious that the Western medicine was wonderful at certain things and terrible at other things.

Chinese medicine seemed to help the problems that Western medicine couldn't and vice versa. It was pretty obvious in 1984 when I started seeing these two medicines together that the future would be some aspect of a combination of the two.

- Dave: I'm so happy you said that, because if you have been bitten by a snake, and you have a broken arm, the homeopathics might just not be the first line of [crosstalk 00:06:10] for that.
- Frank: Exactly. That's why I call it good medicine. It's pretty obvious. If someone's having a heart attack or a burst appendix or acute pneumonia, you're going to use Western medicine. That's what it's really good at. But Western medicine has now taken over all of medicine, and it's only really effective for those 10 to 20% of acute crisis care problems.
- Dave: You ended up over the course of looking at your clinical results and just being open-minded in an unusual way. I'm always intrigued by people who are open-minded 20 years before their peers. You're crazy when you first look at something, and, 20 years later, oh, it's obvious. But it was obvious to you 20 years ago, and you're wondering, "Why are all these other people crazy?"
- I like watching that cycle which seems to be getting faster.
- Frank: Yeah.
- Dave: New ideas like light therapy can come in much faster than they would have. It would have taken a generation before. But in my understanding of your work, you've got Western medicine, nutrition, acupuncture, Chinese medicine, herbal medicine, biofeedback, meditation, yoga, and you put all these together in a way that's pretty unusual for an MD to do. Walk me through your path of how you ... You've talked about how you got Chinese medicine and acupuncture in that clinic in the Bronx, but how did you get into biofeedback, meditation, and yoga?
- Frank: Right, so I started with acupuncture, and acupuncture and Chinese medicine taught me a different way of thinking about the body. Then I started ... Then I met Jeff Bland actually in the late '80s-
- Dave: Ah, love Jeff.
- Frank: Yeah, in the late '80s, and it took me down more of a nutrition path.
- Dave: For people listening, Jeff Bland is considered the father of functional medicine, and there's an episode with him on Bulletproof Radio as well. Keep going, yeah.
- Frank: Yeah, he's a brilliant, brilliant guy. I had wonderful Chinese medicine teachers, and I had Jeff Bland. Then I met a yoga teacher who's been really influential in my life, and he started getting me into yoga and meditation and learning how to relax the body.

It was this journey that I was just on that I wanted to learn as much as I can and learn anything that could help my patients, because I saw the need for benign treatments that many cultures have been using for centuries. In the '80s and the early '90s, I went on this mission of trying to discover whatever I could that could possibly help patients.

Dave: What would you say to someone in medical school right now?

Frank: What I say to them is you're going to learn ... I think if you really want to become a doctor, and it may help your credibility. I think it has helped that I did go to medical school, because you learn who's sick, and who you can mess with. But that's all it's good for. You just know who's really sick, and then you refer them out. If that's what you want, and you want the credibility of being an MD, go to medical school.

But the type of medicine you're going to practice is probably not what you're going to learn at medical school. I just tell them they need to be prepared for learning a lot of stuff which is maybe important, maybe not, but more than likely that they're not going to use if they really want to practice in a functional type of way.

Dave: It's funny. My wife is a Karolinska-trained medical doctor. She knows all kinds of stuff that I don't know and never will know, where to poke the body and what it should sound like, and all the clinical stuff that's frankly fascinating and a complete mystery to me. Then there's this whole body of knowledge that in our own quest for restoring her fertility and writing a book on fertility that we worked out around nutrition and mitochondria and all that stuff, but none of that's in medical school.

Frank: Nothing.

Dave: Is it going to change? Do you see medical school 10 years from now where they start saying, "Here's how energy works? Here's how meditation is clinically correlated with a reduction in diabetes?" Is that ever going to happen or is the system just broken?

Frank: I think the ... Well, I'm a little bit biased. I think the system is broken. I have less faith in the system changing to be quite honest. I think it changes very slowly. I think functional medicine is starting, but there's still so much resistance.

It's almost like a cult becoming a doctor. You know what they do in cults? They deprive you of sleep. They bombard you with all this information, and then you don't question anything. You have to have coffee to stay up all the time. But you're not taught to question things, and I think doctors unfortunately are not that open-minded. I'm hoping with the Michael Pollan book ... I hope you've had him on your show.

Dave: He's scheduled, yeah.

Frank: With a new ... his book on psychedelics, I think it's an important book. I think it may change things when doctors can maybe do some drugs and open the way they think about things. That may change it a little bit more radically, but I think doctors are generally not that open-minded or the system per se.

Dave: It's sad when there's a very high correlation of a physical condition with an emotional or physical trauma in the past. You see lots of cases of dysfunction in pelvic areas that are tied to early childhood things.

Frank: Absolutely.

Dave: But it isn't taught in medical school, and people, at least from the practitioners who I work with, people just don't get well until they deal with the trauma that's in their mind and their spirit. But, man, how do you teach that when you're looking at someone's labs?

It seems like the disconnect is there, but I'm pretty hopeful that people will just stop going to the doctor unless they're bleeding right now, and then they'll go to a new class of people, or doctors are going to come along. I'm pretty hopeful that medicine will shift in that direction because of market forces. But I'm also, I'm only 45, so maybe I'm still naïve in my young age.

Frank: Well, no, I think it is happening slowly. I think millennials tend to ... My practice has become very millennial-oriented. The younger generation get it.

Dave: Yeah.

Frank: My generation don't, I'm 63, they don't really get it. They still believe doctors know more than they actually know. They believe in the system. I think it is changing. I just think it takes a long, long time. But as you pointed out, it is happening more rapidly with every year, so maybe you're right. Hopefully, you are.

Dave: Now, I know from the amount of years you've been in practice that you had to be in your 60s, but if I looked at you, I'd say 50. You're doing something that works. Why do you look young?

Frank: It's all those supplements for mitochondria, a low-sugar diet. I love your bars by the way. Thank you for making those delicious bars. Except the coffee one, I want more of, I can't get it.

Dave: It's coming back, I promise.

Frank: Good. I just try ... I practice what I preach for the most part. I'm not perfect which is great. I don't expect anyone to be perfect. But I meditate almost every day. Probably that's one of the things I do daily. I try eat a low-sugar diet although I love sugar. That's why your bars have been such a win for me sort of my dessert often. When I have my cup of tea at the end of the day, I'll have a bar with a tea.

Dave: It feels like a cookie, but it's not, right?

Frank: Exactly. I don't know, maybe it's good genes, who knows?

Dave: Meditation, supplements for mitochondria, and not eating a lot of sugar are your primary-

Frank: Big things, yeah, I exercise, but not as much as I should. I love riding my bike outside. I'm not a particularly good in-door exerciser. I like being outside in nature, which I think is actually better in terms of exercise. I have good support system. I have a wonderful wife. We've been married for 40 years almost, 39 years. I love what I do. I'm passionate about what I do. I've got a lot of those good things going for me. I think having meaning in one's life and being passionate about what you do is a huge health benefit.

Dave: It's like you've got the perfect laundry list of those things that you figured out in your own life. They're reflected in your books. My next book called Game Changers is where I've analyzed the data from almost five hundred interviews like this and said, "What stands out? What does everyone do?" Instead of, what does that one billionaire do? What does that one successful person do?

I think a lot of people now, especially when they're starting out in life ... You're in your 20s, you're saying, "Well, what do I do first?" This is overwhelming, and I'm working on cracking that code, because a lot of my work is ... If someone had told me this when I was 20, do you know how much money I would have saved? Do you know how much suffering and stress and arthritis and pre-diabetes and chronic fatigue? All that stuff, it was unnecessary.

It's because I didn't know where to start, and I had bad recommendations, including from my medical doctor who said, "Maybe, you should try to lose weight?" And couldn't tell me how even though exercise six days a week didn't work. A lot of my motivation there was, "Man, if I could help even five people not go through all the crap I went through, it would be an act of service."

But you've intuited these, because you got to see so many patients, I'm guessing, because you were exposed to many different medical and healing modalities. You put them in your own life. There's nothing like seeing a doctor who's 63 who looks like he's 50 to say, "Maybe I should listen to this guy." Likewise if you go to a doctor who's completely gray and looks unhealthy, maybe you shouldn't take health advice from that guy, but he can still fix your arm-

Frank: Exactly.

Dave: ... if it's broken. I didn't know that piece of advice.

But, if someone says they're doing functional medicine, and they don't look well, you got to ask them, "Why don't you look well?" if they say, "Oh, I can tell you exactly why, and I'm working on it," great. But if they don't look well, and they don't know why and say, "I don't know. You should do what I say, but I don't do it." Okay, maybe ... Did you agree that with that take on things?

Frank: 100%, yup.

Dave: All right. Well, anyway, my compliments on your anti-aging program, because it's working.

Now, as an author, it takes a huge amount of energy and time to write a book, and I find I'm called to write a book only when I have something new to say and something that's worth people's time, and, frankly, worth the thousands of hours it takes to create a really good book. You just came out with your fifth book which means it's not a rehash of your other books. It's different. What led you to decide that you wanted to write *How to Be Well*?

Frank: Right, well, I think for so many years I was trying to understand Chinese medicine from a Western perspective. I started as a doctor. I went into Chinese medicine. I learnt about energy and chi and balance and the whole Chinese concept. I kept on for many, many years trying to put those ... trying to understand what all these ... what this language was from a Western perspective.

What is energy? I actually think mitochondrial function is energy. What are the meridians? The fascia are the meridians. For years and years and years, I was trying to understand Chinese medicine from a Western perspective.

Then as I got more and more into meditation, and I started realizing, "Why don't I take my Western knowledge and all the knowledge that I've learnt over the years and actually put it into some type of Eastern perspective." Mandalas have been quite influential, or Buddhism has been very influential in my life. If you see my office and my home, there are Buddhas all over. I have mandalas all over.

I try to take the concept of mandala, because I often, I used to, not so much anymore, but I used to meditate on a mandala. I thought if I can take all this knowledge and overlay it on this concept of a mandala where people can meditate about their health and their life that would be a great thing.

It was an about or a coming around to my roots in a way or re-envisioning the way I was, first of all, trying to understand Eastern medicine now I thought I'll take that Western concept and overlay it on an Eastern concept. It was a new way of thinking about a lot of the old ways of practicing medicine.

Dave: For our listeners, you've probably heard of a mandala, but a lot of people think it's a round picture. But the original Buddhist mandalas and even some of the sand paintings from Native Americans were meant to meditate on. You look at them for a long period of time, and then they start moving, and they transport you places.

Frankly, I thought that was mostly BS. I went to Tibet where I had yak butter tea that led to the creation of Bulletproof coffee, and I bought a traditional mandala that was painted with local minerals. It's still hanging downstairs in Bulletproof Labs Alpha now.

When I spend a lot of time meditating, or I come back from a week of doing the 40 Years of Zen electro thing, I sit, and I look at that thing, and it actually moves the way the

Tibetan gurus told me that it would move. But if I don't spend a lot of time getting into those states, it just looks like a cool painting.

But there's something about hacking the visual system, there's some kind of thing that we'll probably figure out over the next 10 or so years with neuroscience what's really going on there. But there is something special about looking at a properly built mandala. But I got to ask you this since we're talking about it, how do you know if you've got a good one versus one that's just a pretty bunch of kaleidoscopes?

Frank: I haven't got a clue. I don't know.

Dave: Darn it. It's a fascinating thing, and I would actually put mandalas in the field of biohacking, of changing the environment around you or inside of you, so they have control of your biology. Looking at something that does something to your brain whether it's a TV or a mandala, it is part of your environment, and it's something you can be conscious about. I love it that you brought that up, and that that's been a part of your formation.

You went through all these things, and you decided that you wanted to put together a new book that included that knowledge. Not necessarily how to pick a good mandala, but this idea, and you actually built a mandala for people to think about for their own wellness. What's in it?

Frank: Well, first of all, you the patient or the reader are in the middle, because to me, it's all about you taking control of your own health. I as a doctor can guide you, can teach you stuff, but, ultimately, you know more about your body and more about your health than anybody else.

It's really trying to teach people to realize that they should become their own doctors and be at the controls of their own health, so, you the readers in the middle. Then, as in mandalas, there are four gates. I had to choose what were the four underlying ... What are the four underlying imbalances that most people have or suffer with.

Then I surround it with these six rings which is: how to eat, how to move, how to sleep, how to protect ... Because I think in this day and age with all the chemicals around, you need to learn to protect yourself from the environment, or what's in the environment ... How to relax, or how to chill out, and then how to connect. I went from the most material in how to eat, to the least material, how to connect which is just as important as to how to eat.

That was the structure. I had to cut ... I came up with a structure, and then I would fit all the tips into that structure.

Dave: When I write a book, I always find that part of the process of writing the book is that I learn something that I think my subconscious was telling me that I needed to learn. Then when I'm done with the book, it all comes together, and then I know something I didn't know. Did you learn something new when you wrote the book?

Frank: Yes, I did. I realized that the small, ordinary actions we take on a daily basis, or our habits that we perform daily have ... I say that ordinary actions have extraordinary healing effects. The little things that I took for granted that I think most people take for granted, I think have really important health effects.

Like walking in the forest or walking barefoot on the beach, being kind to others, having gratitude, maybe having a dog or a cat, having a pet, these little things ... Listening to music is a huge one for me, and I think for a lot of people. These little things that happen to us daily, we don't really put them in the sphere of medicine or health, but I do believe that they have a huge effect on our health.

I think while I believed that on some level, I think with writing the book I realized how important those daily actions we take are to our health and don't take them for granted. It's not just about a low-sugar diet and going to the gym and sleeping well which are all very important. But it's those other little things that people don't associate with health which are hugely beneficial.

Dave: Part of my I'm-going-to-live-to-at-least-180 program is modifying my own habits, so that I take less of the hits that you get from life. Whether it's stress, environmental toxins, in a similar way of thinking to what you're talking about there. The idea is, if there are hits that didn't create any benefit for me, it's just a bad habit, and it's not a functional habit. If I can replace it with something equally pleasurable or equally hard to do, but something that doesn't cause damage or, better yet, causes improvements, it actually isn't a cost to me to do that. It's just about knowing how to do it.

Frank: Yup.

Dave: Do you think people have the possibility to live longer, or at a very minimum at least be healthier for longer by following the type of advice that you have on how to be well?

Frank: I'm, I won't say 100% sure but 99% sure. I do believe that I've seen it. I've seen just practicing this type of medicine for so long seeing healthier older people. There's no question we can stay healthy for longer and longer. I think there was a new study out, not that I'm a big follower of studies, I read recently about they reckon that people can live well into their hundreds now.

Yeah, I do believe it. As you said, I think if you can change negative habits into positive habits that makes a huge difference. There's a famous saying, "Neurons that fire together, wire together." I believe if you can make something into a habit, and it's positive, it can only help you.

Dave: If someone reads How to Be Well, and they understand that the six keys that you talk about in the book, their, at least my understanding of things is that their health span, which is the amount of time that they're going to feel really good, is going to be longer. That's the worst-case scenario. The best-case scenario is, well, we know some people are living to 120, maybe you could be one of those. Maybe there's a few hacks over the next hundred years-

- Frank: Exactly.
- Dave: ... that might improve your ability to get beyond. That's why I got to 180. I just took what we could do today and added 50% based on technology and progression. I think I'm being conservative, but I don't want to scare people.
- Frank: Right, no, no, I think you're right. I think I'm all about the health span. But I love what you're doing, and I love all this hacking which is a new way of thinking for me. I love what's ... I think it's really exciting what's going on. When I've been doing this for so long, and it's only in the last 10 years that there's a real excitement about this, so it's great.
- Dave: Can I run what I learned writing Headstrong, my book about mitochondria past you and see if it passes the sniff test for you as a practicing physician who's also looked at other modalities? Even after I published the book, it's still been gelling for me, but I'm to the point where my body's a Petri dish, and it's almost entirely run by ancient microbes, mostly mitochondria, and they talk a lot with the ones in my gut. They're calling my second-by-second and a lot of the reactions in the world, and that I may be 5 or 10% of what it does, because they'll listen to me a little bit, but, really, they're going to listen to a tiger outside or chronic toxins or whatever and just cut me out of the loop.
- My job is to make a Petri dish where these things are happy and effective, and they get enough stress not too much stress. I'm growing my body like you would grow a kombucha or a yogurt or your sauerkraut or something, because, really, I'm just a collection of ancient bacteria all running dumb, little bacterial programming to make sure that the Petri dish can get another meal. Is that too dark, or is that kind of accurate?
- Frank: Yeah, I think it's accurate. I see the body as an ecosystem. Yeah, I think that's a pretty, I think or fairly accurate way of seeing the body.
- I see everything as an ecosystem now. Our bodies, our relationships with other people, the culture in general. That's a concept that was ingrained in me from my Chinese medicine teachers Efrem Korngold and Harriet Beinfield in San Francisco. They ingrained this concept of ecosystems, and everything's about an ecosystem. It's you're in an ecosystem working with the other ecosystem, and the ecosystem of the family, of the culture in general. So yes, I do believe that's the microscopic ecosystem you're talking about, yes.
- Dave: I woke up this morning thinking about biological computation and how I like to think bacteria are pretty dumb and on a one-by-one, on a single bacterial basis, they pretty much run a simple, run away from scary things, eat everything, and make sure you reproduce before you die, and that's really ... Oh, and help other bacteria if you get those first three down, you form biofilms and all. That's the human condition as we spend a lot of time on those three things.

But I was looking at the wisdom of Mother Nature, and it turns out when you have unfathomably large numbers of bacteria and all, what you end up with is a really good biological, computational engine where Mother Nature doesn't really care if a few people die, at all. As long as some people get much better than others over time ... This goes for all species, I'm just humanizing it. Where if you have a big enough ecosystem view, all of sudden you realize that there's an incredible elegance that comes from, well, a lot of suffering when people don't do things right, but the people who do things right or have the right genes and the right ecosystem and all that, they tend to evolve.

What that means is that it's solving the hardest problem of all mathematically, but it's just doing it through, that one failed, that one failed, that one failed. If you have a broad enough view, it's really elegant. But if you're one of the ones who's about to fail, it sucks, and we can maybe change that.

I have no idea if there was a question for you in there, but when you're talking about ecosystems, you made me think about that, so I thought I'd share it.

Frank: Yeah, well, I think ... What's scary now is the government is screwing up ... Climate change and what we're doing to the environment is making it so much harder for all of us. People don't realize the negative effects on your own personal health from the EPA screwing around with ... just trying to make more money for corporations. That's a big problem.

I think we really need to become aware of and start mounting some resistance, because what we're doing to the planet is affecting us. We are microsystems of the macrosystem or microcosms of the macrocosm. What affects a macrocosm is absolutely going to affect us.

Dave: What are the two man-made toxins that you're most concerned about?

Frank: Two?

Dave: Or three?

Frank: Well, the one that I'm concerned about because no one really talks about it is glyphosate.

Dave: Yes-

Frank: I think that's-

Dave: ... me too.

Frank: There's not enough ... Even when you're seeing studies on chemicals, they're leaving glyphosate out, and I think glyphosate is a huge problem. I know you've talked a lot about mold. I think mold is a tricky one. I don't know if ... I'm not sure what the two or three are.

- Dave: You would put mold above mercury? I was-
- Frank: No, no, no, no, no-
- Dave: ... guessing you would say mercury.
- Frank: No, I just said mold, because I think of you as mold, because we actually ... When we see patients we recommend the movie you made on mold.
- Dave: Oh, thank you.
- Frank: It's just one of the things we recommend. I think mercury is probably, yeah, you're probably right. I just saw someone today, just from eating ... I see a lot of people actually who eat too much fish, and their mercury levels go up. I would say mercury's probably up there.
- I think there's so many. We have thousands and thousands, and I think the problem is more the number of toxins that we're exposed to, and it's just overloading our system rather than one or two particular ones.
- I always mention glyphosate, because that's the one that ignored or not really spoken about, or I think Monsanto's done a really good job of saying it's safe or making us all believe that it's safe.
- Dave: It's funny. A while ago, I think it was Philip Morris changed their name to something no one can actually pronounce when they see it including me, so I don't remember who it is and now-
- Frank: Monsanto, yup-
- Dave: Monsanto's-
- Frank: ... it's no more Monsanto, yup
- Dave: Yeah, they changed the name. Everyone hates Monsanto, so we'll just change the name. Now they're a part of Bayer-
- Frank: Yeah, exactly.
- Dave: ... which is part of IG Farben which is a company with some history that isn't really positive.
- Frank: Right.
- Dave: Basically, if you make glyphosate, guys like Frank and me and millions of others are going to know who you are, and who knows, it might end up in your own water, so stop making it already.

Now, I've had a couple guests on talk ... like Zach Bush, and I think Jeff Smith a long time ago did a documentary on GMOs and glyphosate. What's your biggest concern about glyphosate, and how it's affecting your patients?

Frank: Well, one of the concerns is that no one talks enough about it. It's a registered antibiotic. My biggest concern clinically that I'm seeing is it's screwing up people's microbiomes. We are now ... I'm always thinking about this. We are seeing more and more people with ... You may have had someone talking about it, with mast cell activation. I don't know if you've-

Dave: Yeah.

Frank: We see more and more of these hyperactive mast cells and clinical problems from that.

Dave: By the way, that includes postural orthostatic hypotension which is something that's come up twice in recent interviews including with Nick Foles, the MVP Super Bowl champion. His wife, Tori, is dealing with it, and it's tied to mast cell activation, and you're saying that's tied to glyphosate?

Frank: Well, I just think that glyphosate is screwing up our microbiomes so much amongst other things that it can trigger ... When you think of a macrophage, that's your primary inflammatory or immune system cell, so anything can affect it. Once you release ... The contents of a mast cell are released, all sorts of different things can happen.

I am a big believer in these little things like glyphosate and what it's doing to the microbiome are causing all these problems downstream. I can't say directly glyphosate is an issue, but why are we having so many of these problems today that we didn't have 20 years ago? That's why I think glyphosate could be a problem there.

Because I'm not ... 20 years ago, I was not seeing the amount of autoimmune problems, mast cell problems that I'm seeing today. Something we're doing to ourselves, something we're eating, something that's going on in the environment is causing this. I just intuitively believe that glyphosate is possibly one of those factors, and probably one of those factors.

Dave: Well, thank you for calling it out. I would agree with you there.

In fact, I'm talking about number four. You've got six keys in your mandala and in your book. The fourth one is protect. For these things, you're saying expose yourself to less of them for the most part. Is there anything else we should be doing to protect ourselves from the toxins, both Mother Nature's toxins as well as the ones that we make ourselves besides eat less of them or breathe less of them?

Frank: Yeah, I put, for instance, get some sun which is ... For the most part, it's decreasing the amount of toxins that you're putting into your body. But the second part, which is probably just as important, is how do you improve how you break these chemicals down? That may mean eating certain foods. It may mean taking certain supplements.

But the most important part of protect is just being aware of all these chemicals out there and trying to decrease your exposure to them.

But I do believe, I do believe that the way you eat, the way you [inaudible 00:37:08]. Here's a perfect example, going for a walk barefoot on the beach or in nature. The whole concept of Earthing which I think is ... I'm not ... The research may or may not be there, but I do believe that the more contact you have with nature, that's going to affect the way you process these chemicals.

Once again, it's all these little things that you do on a daily basis that are still going to affect the way you process these chemicals, as opposed to specific things that you can do. I think the supplements you talk about improving mitochondrial function, indirectly will improve that as well.

Dave: I love it that you're talking about sunshine and Earthing as ways to protect, because a lot of people look at the sun as a form of assault, and ultraviolet rays are dangerous. How much sunshine should people get on a daily basis without sunscreen?

Frank: Well, at least half an hour. Look, my skin is damaged from growing up in South Africa and having too much sun. I acknowledge that. But to be scared of the sun, we ... For centuries and centuries, for eons, we've lived under the sun. It's crazy to think that sun is a problem.

Obviously, too much sun, and you've just got to be smart about it. But I think at least half an hour in the sun without sunscreen a day is vital for health. Most people know how much better they feel when they're in the sun. But they don't realize the benefits they're actually getting from it, away and above just feeling good.

Dave: A lot of people don't know that that kind of exposure to sunlight increases the thickness of the collagen in your skin, and it reduces your incidence of nearsightedness which is why we both talk about that in our work. My skin is looking really young right now despite the fact that I go out without sunscreen on a regular basis. But I don't spend eight hours a day in the sun-

Frank: Exactly.

Dave: ... without a hat or a shirt or something, because well, that would be dumb.

Frank: Exactly.

Dave: Just because too much is bad, doesn't mean zero is good. I think we're just bad as human calculators at recognizing, there's an effective dose, and too little is just as bad as too much.

Frank: I think that's a good point. There's such an either-or culture. Sun is either good or bad. The nuance of all these aspects of health are ignored.

Dave: In your book, you talk, in addition to protect, you talk about these other five pillars a total of six. In the first one, and one where I would agree with you, is eat. You got to do that right. Give me the three sentence version of how you recommend people ought to eat in your book.

Frank: Well, I think eat as close to nature as possible. But what's happened over time, I think more and more people have become carbohydrate intolerant. Foods that we thought were healthy for most people or for many people are not as healthy as we thought. This whole concept of whole grains being healthy I think is probably nonsense.

Dave: Yeah, yeah, just say it like it is.

Frank: Some people do well on a vegan diet. But for the most part, most people I see clinically do much better on a Paleo or low carbohydrate type of diet, basically eating protein and vegetables. Obviously, it's the source of the protein. I'm not endorsing factory-farm meat, but I'm endorsing grass-fed, grass-finished meat, organic chicken. Try to get food from your farmer. Try to eat locally try to eat food that hasn't been altered. The less altered the food, the better it's going to be for you.

Dave: Are you concerned about people on Paleo or otherwise just getting too much animal protein? I've been seeing effects from that in people.

Frank: Well, yeah, I think you've got to be smart about it. I don't think there's one way for everyone. I take myself and my wife as an example. I do much better when I eat very, very low carb. I love, believe me, I love potatoes, and I love my sugar. I love all the shit that I shouldn't be eating. I can't say I don't love it. Whereas my wife actually does better eating more carbs than I do. I do well eating a lot of fat and a lot of protein.

In fact, I became pre-diabetic about 10 years ago. I was ... Growing up in South Africa, I was eating a lot ... You eat lots of fruit. I was brainwashed like everyone else that I shouldn't be eating meat, because my father died of a heart attack when he was 54. My brother had a heart attack when he was 50, so I had been programmed to think that fat clogs the arteries. I was eating lots of whole grains and fish, and I thought I was eating this healthy diet, and I became pre-diabetic.

It's only when I realized then I started eating lots of fat again, saturated fat, and I lost weight without even trying to lose weight, and I felt fantastic. Whereas my wife needs to eat more carbs. I think everyone's a little bit different. I don't think there's one right diet for everyone. But I do think the majority of people in this day and age especially as you get older do better on a lower carbohydrate diet.

Dave: You're totally right there. I've also seen a lower percentage of women who do well over time on very low carb diets. They do great if they cycle in and out.

Frank: Yes.

Dave: But it seems like moderate carbs, but that doesn't mean whole grains and sugar as the carbs.

Frank: Exactly.

Dave: It means eating safe carbs, more starches, and things that metabolize slowly, that it seems to support healthier hormones.

Frank: Exactly.

Dave: Even on guys, cycling in and out, so occasionally have some carbs, not cheesecake and Twinkies, but some carbs and then going back in ketosis, it seems to produce the best long-term results.

Frank: Yes. Yeah, and I see that clinically too. There's no question. That's what we do with the ... We put people on a ketogenic diet or even on a low-carb. We tend to cycle people. Most people, some people are fine, but we tend to cycle them in and out, absolutely. People generally do better like that.

Dave: I was also pre-diabetic, fasting blood sugar was 117 in my 20s. I had a recent glucose or insulin sensitivity test. I was one on a scale of one to 160, so I'm perfectly insulin-sensitive, and my glucose tolerance was high, because I can process carbs, I just don't do it that often. I do it often enough that that mechanism in my cells is ready to do it. I primarily have fat and vegetables and grass-fed proteins and all.

But when I did only fat and protein for a while, I actually got food allergies and some auto-immune things I didn't have before. I think it was probably gut bacteria.

Frank: Yes.

Dave: I feel bad that there's a couple hundred thousand people listening to this right now going, "Good god, what do I do right now?" The answer is, just like you said, it's eat more food from your farmer, gets lots of vegetables, and play with the rest until you feel good. That's what I tell people who aren't going to read all the books and do all the hard work. Do you endorse that as a first step, or is there a better first step?

Frank: No, that's perfect. That's exactly what I endorse. In my book, it's all about learning about yourself, because there is no one right way.

There are basic concepts, as little sugar as possible, avoiding factory-farmed meats, avoiding the vegetable oils. There are basic concepts, but, for the most part, it's really learning how you function in the world, and how you tolerate foods, because ... Also, everyone's microbiome is different.

Now, that we're seeing people with this mast cell stuff, some people do well on a low-histamine diet, but those tend to be temporary problems. Once you correct the

microbiome, once you correct the underlying parasite or Lyme or whatever it is, they become less mast cell reactive.

You've got to learn about yourself. Ultimately, you've got to become your own doctor.

Dave: Well said. I went through this period last week. I added some amino acids back into my stack of 150 or so supplements a day I take. These were some older amino acids that were in the back of my cabinet, "Oh, I should take those."

I'm on a fishing trip in Alaska, and I start getting hives. I haven't had hives in 10 years. They used to just plague me. Hives are a sign of mast cell over-activation. I [inaudible 00:45:24], "What is going on here?"

I actually took a Benadryl which I haven't had in so long. "What is up with this?" I thought about it, "What did I change recently?" I pulled them out of my rotation, and they went away within two or three days.

But I went through a two-year period where I had hives every single day, and it was torture. There was ... I have tens of thousands of people listening to this right now who deal with that same thing and don't understand, it's their gut bacteria. Maybe they're wrong, or maybe what you're feeding them is wrong.

Frank: Exactly.

Dave: Anyone who has stuff like that going on, it's your fault. It's something you're doing. You just don't know what it is. It's up to you. A functional medicine doctor can guide you, but, end of the day, you're going to have to notice, "I'm itchy today. I wasn't itchy yesterday," and become your own event correlation engine.

Frank: Exactly.

Dave: Fortunately, I figured that out. Because I was going down that what if this continues for a year? How much would that suck? Fortunately, it was only a one-week problem, but it was not a fun one week.

All right, let's talk about number two on your list. You talk about sleep, and you and I both are huge fans of sleep. How much sleep do people need?

Frank: Oh, I think that's also personal. I would say anywhere from seven to maybe even nine hours. I do have ... I actually function on six and half to seven, but I probably need more. But I would use a lower number at seven. But some people need up to nine hours of sleep.

I don't think ... A lot of people think they can get away with just five hours of sleep. I'm not sure. I think it will catch up to them. I would say a minimum of probably six and a half and probably seven hours of sleep.

Dave: I went for two years with an absolute cap of five hours of sleep and quite often about four hours of sleep. I found I could actually function really well if I did my diet right, I did everything right.

It wasn't meant to be ... It was going to be a 30-day experiment to show I was putting myself at risk of gaining weight. But I kept losing weight and feeling good, and I managed to start a company while working as a VP in the tech world.

Frank: Interesting.

Dave: It was a good thing to do from a short-term perspective. Being a little older and wiser, I don't endorse that for long periods of time, but I know it's possible. I also know telomeres may have paid for it. I may have lost 10 years at the end of my life, but I don't know. But that's okay, I'll reverse that anyway.

I can say that, because I'm in my mid-40s. When I'm a hundred, you'll have to see if I'm right.

All right, next up, movement is your number three on your list of six keys. What kind of movement? Because there's so much movement. Everyone on the web says, "Do this, do that." What's your take on movement?

Frank: Well, I think there are all different aspects of movement from the classic aerobic and weight-resistance training or weight training and core. But the one part of movement that I think people ignore is the whole fascial system. Because what I see a lot clinically ... and the fascia, I didn't ... Learning about the fascia, I didn't really learn about it in functional medicine. I didn't learn about it in Western medicine. I didn't really even learn about it in Chinese medicine.

The concept of fascia I sort of got from yoga. But the idea that this soft tissue tightens around not only your organs but muscles, and you develop scar tissue and thickening, and it squeezes vessels, it squeezes lymphatics, it squeezes nerves. I think the idea for me of movement is not only moving and doing your resistance training and stretching but releasing that tight fascia.

I think that's really important, because I see a lot of ... Someone will have tight hips, and the problem they'll present, it won't be with the hip problem. They'll present with back problems or a knee problem or something.

I think keeping your fascia loose, and why I'm talking about this is because everyone else knows about keeping your strong core and doing interval training and yada, yada, yada. But please don't forget about the fascia and keeping it loose.

A foam roller is something really important to have and going for bodywork, if you can. But keeping that fascia limber and letting your muscles and your joints move freely is really important in terms of movement.

Dave: I like to take a foam roller and put it on the Bulletproof Vibe, the whole body vibration plate we make. I'm rolling and thirty times a second, it's massaging, or using one ... There's actually vibrating foam rollers now.

Frank: Yes, I have all of that stuff. I love it. Yeah.

Dave: It's kind of funny when people are saying, you do what? You're a CEO, and you're a total dork anyway, but really? Yeah, really. It makes a difference, and you feel good all day. It's five minutes of doing crazy stuff. It seems worth it, and it sounds like you're in that same camp.

Frank: Big time. I think the whole idea of the meridians running through the fascia, not universally accepted but fairly well accepted. Even from a Chinese medicine perspective and energy, you need to release the fascial planes to let energy move freely.

Dave: I would say there's really good evidence that fascia carries electrons at this point.

Frank: Oh, there is, yeah. Yup.

Dave: It's how your body stores hydration. If you have good collagen in your fascia, which is what it's made out of, you can carry a current better. It appears from the world of acupuncture that there's information, or there's something going through there, because we can modify it with needles, and we can measure changes in resistance where the meridians are.

Frank: Exactly.

Dave: It seems like keeping that hydrated and functioning well is in our best interest, because it's there for a reason. There's other people who will say this and that and lots of other things, a lot of which I believe. But, at a minimum, I think that that passes all of the scientific muster that I would want it to. Are you there from that perspective, or is there even more that you're sure of?

Frank: 100%. No, 100%. 100% there, yeah.

Dave: Okay.

Frank: I just see ... It's just one ... Why stress it? It's one of those areas not really stressed by even the holistic doctors or the functional medicine doctors. It's that one area that they've forgotten about, the whole fascial system.

It's not something I learnt even at acupuncture school. I didn't learn it medical school. I didn't learn it at acupuncture school. I actually learnt it from a yoga teacher, an Iyengar yoga teacher who then turned me on and then an acupuncturist, [inaudible 00:52:01]. But it's interesting, it's not taught in the traditional schools for some unknown reason.

Dave: A recent study came out that blew me away. It was some physicians who had figured out a technique of microscopy to look at tissues in the body while they were still attached to the body. They looked at the fascial planes, and they found that when they weren't dead that there were actually channels inside your fascia that carry fluid that are completely invisible when you take the collagen out, and you look at it all flattened out on a microscope. They found there was a pulsation through there.

Apparently, there's this whole system in our fascia that no one ever noticed until now, except for maybe yogis or massage therapists or something, because they could look at the effects of it. But there's stuff going in there that I don't think anybody knows enough about.

Frank: I agree 100%. When you think of it, the fascia you're connected from head to toe with your fascia. Why would you have this sophisticated system in your body if it wasn't providing some type of function. It's this arrogant, especially Western way of looking at stuff. We don't know what the appendix does, so just take it out if it's not working, or the tonsils. The fascia is just one of ... It's an organ system, unfortunately, an ignored organ system.

Dave: Well, that is changing I think pretty rapidly.

Frank: Yup.

Dave: All right, we covered your first four in your book, eat, sleep, move, and protect. You've got two more that are probably the hardest ones. The next one is unwind. What's your definition of unwinding, and how the heck is someone listening to this show supposed to do it?

Frank: Well, as I've gotten older ... When I was younger, I would exercise, and I got into yoga, and I tried meditation. I could never really meditate. It's only recently that I have a regular meditation practice. I see how important it is to really slow down and activate the parasympathetic system.

Most of us are too Yang. We're running around, our mind's overactive, we just don't know how to slow down. It's only when I realized or started meditating regularly, and it became a habit. It's all very well to meditate once a week or go to yoga once or twice a week. But once you start actually learning to control your mind and learning to calm down your nervous system, it makes a huge difference to your health.

That's what I really mean by unwinding by basically relaxing or slowing down your nervous system, because most of us don't have a nervous system that tends to slow down or relax. To me unwinding is, for the most part, relaxing the nervous system.

Dave: Meditation is the primary way that you do that?

Frank: Well, there are other ways for people, because people struggle with meditation, but you can learn to knit. It's focused concentration. I spent years trying to do mindfulness. Then

we had a meditation teacher come to my office, and he gave us mantras. He taught us the Vedic meditation which I always thought was ... I don't want to learn TM. I don't want to ... What about ... Mantras just made no sense.

I realized how they just made it really simple. It's just a simple way of learning to control your mind. It's whatever way you do it. It just needs to become a habit.

Dave: I read a book maybe fifteen years ago by a surgeon, I think he was Johns Hopkins, but it might have been Harvard or somewhere. He was a Western guy, and he renamed himself to Dharma Singh Khalsa, and the book was called *Meditation is Medicine*. This guy was a straight up, double-board certified, super strong physician saying, "Here's the mantra and the finger pose, the mudra, for this medical condition," in this whole book.

For two years, I'd wake up ... I decided I'd be a morning person which I'm not genetically. I woke up at 5:00 AM every morning for two years, and I spent an hour doing mantra-based meditation and drinking my tea, I'd have my coffee afterwards, different finger poses and sitting in the living room going, "Ohm-ah-mush ..." All this crazy ... you know what? There something interesting and useful that goes on with that.

I don't do that on a regular basis now. But for people listening, you got to try stuff, and if making weird sounds that don't make any sense to you rationally, if it works, it doesn't matter. It's not a rational thing. You're using vibrations in your body that listens even if your brain thinks you're a total buffoon for doing it. It doesn't mean it doesn't work.

Frank: Exactly. It's just try it and see what works for you. I think finding some type of meditation practice, I believe is essential for staying healthy, especially in this day and age, and especially as we get older.

Dave: Very, very well said, so that's your unwind. Your sixth one is one that I found ... struck me when I started Bulletproof. It was a very small blog when I started it. When I started the first Bulletproof Conference going back five years ago ... By the way, our next one is going to be March 28th. We've reached about three thousand people now.

This strong community around the world of biohacking coalesced around this work, and it's really profoundly affected I think how much I age, and I really genuinely enjoy that. For me, that's a big sense of my belonging and meaning and connection. But that's an odd way to do it.

When you talk about connecting in your book, how would someone who isn't go start biohacking or something, how does one go about, as you put it, awakening and enhancing that sense of belonging and meaning in their life? What are the quick and easy ways to do that?

Frank: Sure, so when I talk about connect, it's first of all connecting to yourself, so we're talking about the meditation. Then it's connecting to your surroundings, to your family, to your community, finding your tribe.

In this day and age, the millennials talk about a tribe or finding your tribe. There are many ways you can find your tribe whether it's a local yoga studio, your church, or whatever it is. I think finding people that you feel comfortable around, that believe the same things as you. You can talk about concepts that interest you. I think that's really important having that support system. Knowing that when you're down and out they're going to support you.

That's why a lot of these communities, cultures, Blue Zones-

Dave: Blue Zones, right, yeah.

Frank: ... they're all strong communities. I think there's a huge aspect of community to health. Finding your tribe, and it doesn't have to be a religious tribe. It can be any type of tribe.

Then as we were talking about earlier, connecting ... The environment is really, really important. Realizing that Mother Earth is going to affect your health. I'm a big believer and maybe also coming from South Africa and knowing that the system is rotten, and you've got to get together to fight the system, so joining organizations that are meaningful to you. You meet people that way, so you're learning to try to help the environment. You're working and meeting people that have the same belief systems as you, all important.

Having meaning in your life helps your health as well. Finding some organization that helps the environment, you'll meet people that's connecting to local people around you, and it will help you, because you'll feel good about yourself when there's passion and meaning in your life. I'm all for finding organizations like that and becoming part of them.

Dave: I've got a nuanced question for you in there. You talk about fighting the system. But if you're fighting a system, you're triggering your fight-or-flight response.

Frank: Right, okay. That's a wrong word, thank you. Not fighting the system, but you want to try change the system.

Dave: Okay.

Frank: Yeah, maybe fighting is the wrong word. Thank you.

Dave: I wasn't looking to criticize your language at all, but more for people listening, there's a group of people who get really passionate about fighting and pushing against something, and that seems to make it stronger whether it's glyphosate or politics or whatever.

The lower stress version of that is just break it. You don't have fight against something to break it. Breaking stupid things is incredibly fun, you can build a community around that. But you don't have to fight them in order to break them.

- Frank: Fair enough.
- Dave: Okay, good deal. I found that when I got really involved in fighting against something that I was having less of an impact on it than if I just said, "Well, yeah, it exists. But, man, it's going to be really fun to watch it fall down."
- Frank: Yeah, good point.
- Dave: For me, it was a spiritual progression, so I'm hoping for people listening like how much energy are you putting into becoming more? Super personal development question.
- Frank: Good point, I like that.
- Dave: Thanks for listening to that.
- I've got one more question for you, Dr. Lipman. If someone came to you tomorrow, and they said, "I'm going to perform better at everything I do as a human being," so not just a sport or job, just at life. Three most important pieces of advice, not six that are in your book, but only three, what are the three most important pieces of advice you have for someone who wants to do better at everything?
- Frank: Learn to meditate.
- Dave: Okay.
- Frank: Make sure you're sleeping appropriately, get good amount of sleep, and find meaning in your life. I'd put all of those probably before eating even. Passion and meaning in your life, learn to control your monkey mind, or mediate. I think meditation goes way beyond just controlling your mind. Sleep, don't take sleep for granted.
- Dave: I've got one more bonus question for you.
- Frank: Okay.
- Dave: I normally end on that question, but you wrote another book. It was called Ten Reasons You Feel Old and Get Fat which is a fantastic title. Give me the three biggest reasons you think I'm going to get old, so I can hack them. What are they?
- Frank: Well, stress and cortisol, and what stress does. Your microbiome, what's going on in your microbiome. Loneliness or the lack of connection, I think is huge or sleep as well.
- These are these little things that we, as I said right in the beginning, we take for granted. Not being connected to other human beings is a huge factor for aging. Lack of connection, there's a South African concept called ubuntu. Ubuntu means what makes us human is the humanity we share with each other. A lack of ubuntu in your life which is connection but maybe a little bit more, a microbiome that's completely out of whack, and an inability to deal with the stress in your life.

Dave: Very cool. Well, I think we covered those in your overall six points. But since I am actively working on being young beyond what Mother Nature wanted me to, I appreciate that extra emphasis on those things.

Now, your new book is called, How to Be Well, and people can find that anywhere that they like to buy books. The website for that is bewell.com where they can find out more about your stuff. Do you do more on YouTube or Instagram or Facebook? Where can people follow your daily musings?

Frank: Yeah, my musings are on Facebook and Twitter. I have someone else on my team do my Instagram, the Be Well Instagram. I have my own personal Facebook and Twitter where I have my personal musings. Then the website, we have, I write ... I put out ... We put out a couple of blogs on the website, but I write at least one a week myself, so just go to bewell.com and free newsletter.

Dave: Excellent. If you enjoy the show, you like new thoughts and new ideas, and you probably know to watch out for confirmation bias where you only listen to people who agree with you which is a path to not making good decisions, and I do my best to bring people on the show who don't always agree with me. I also like to bring people on the show who have done something new and unusual before everyone else, and Dr. Lipman has done that.

I think you'll find if you look at his work, and you look at his website that you'll find that there's new and interesting stuff that's in alignment with what you're paying attention to, because you take the time to listen to the show. It's definitely worth your time. He's a luminary in his field and has done quite a lot of good for quite a lot of people. Dr. Lipman, thanks for being on the show.

Frank: Thanks, Dave, and thank you for all the work you do. Let me know when those coffee bars are available.

Dave: All right. Bulletproof Coffee Collagen Bars are coming back for people listening. I don't have a date for you yet, but they were a limited edition. We weren't sure anyone was going to go for a coffee flavor, but they became my favorite flavor. I have six of them left in my personal stash, and I hoard them. But they are coming back at some point.

Frank: Okay.

Dave: Thanks again.

Frank: Thanks, Dave, okay.