

Announcer: Bulletproof Radio. A state of high performance.

Dave: You're listening to Bulletproof Radio with Dave Asbury. Today's cool fact of the day is that we just found the world's oldest cheese. It was found in an ancient Egyptian tomb and it was made from cow milk and either sheep or goat milk mixed together and it was found in a broken clay jar from the Thirteenth Century BC in Egypt, which is kind of cool, in a city called Memphis. And chemists at the University of Catania in Italy used mass spectrometry to analyze the antique cheese which basically looked like a piece of soap that weighed several hundred grams.

Dave: So we have 3,200-year-old cheese. And we actually figured out that their cheese had bacteria that caused an infection called brucellosis in it, so our cheese making has come a little bit further along.

Dave: We don't really have that disease in the US anymore, but it affects hundreds of thousands of people and animals worldwide today and it looks like the flu. It's not that you really need to worry about that, but it's kind of interesting to note that we've been using dairy fat in our diet for a very, very long time and we're still around.

Dave: Today's guest is an amazing human being. A dear friend, a former guest on the show and 11 time New York Times bestselling author and internationally-recognized leader, speaker and educator in the field of functional medicine. He's the Pritzker Foundation Chair in Functional Medicine at the Cleveland Clinic and all-around just amazing, helping human who has done more to change the face of modern Western medicine to make it more functional than anyone else I know. None other than Dr. Mark Hyman.

Dave: Mark, welcome to the show.

Mark: Thanks for having me, Dave. Good to be back!

Dave: The last time I interviewed you was about the Doctors Farmacy where you were talking about how to use food as medicine and we talked about why you might want to eat some fat and some meat. We talked about the dangers of fructose going back a couple of years in 2014. Mark, what's changed in medicine since we first talked four years ago?

Mark: Oh my goodness! So many changes are happening. We are actually in an extraordinary scientific revolution that is finally breaking through to mainstream medicine and the micro-bio is one of the profound wedges in the system that's changing the paradigm where we see how the gut flora effects your immune system. It can cause depression, cancer, heart disease, diabetes, obesity, Alzheimer's, autism and we're learning that the way we think about disease doesn't make sense anymore.

Mark: I've been at Cleveland Clinic in the last four years and it's a traditional medical system, but within that system, people are realizing that the way we think about disease has to change. The way we deliver care has to change. And we're seeing people coming out of the woodwork wanting to work with us.

Mark: I just talked to a cardiologist there who wants to study keto diets versus Mediterranean, look at all the metabolic effects and we're just seeing an incredible openness to this paradigm shift that's happening. More than I've seen in thirty years of doing this.

Dave: In addition to all of your writing and your Broken Brain docu-series and your work with some of the leading, I would call them, skeptical physicians in the world who are less skeptical because of trying your stuff. You just launched Doctors Farmacy, your new podcast, which is doing really well and it's that kind of success that led me to profile you in my new book, Game Changers where I've looked at almost 500 people who had big impacts on the world to say what are the common elements amongst them. And one of the things that stands out from you just in that data-driven analysis is you have this really big kind of compassionate, giving heart that you don't find in every doctor. Why are you like that?

Mark: That is a great question, Dave. I remember being three years old and just wanting to love everybody and hug everybody and I was noticing that all these grownups were just so not into it and were so disconnected from their hearts and it was just so painful for me. I have that feeling that it's never gone away and I still feel like that. I don't actually know where it came from. I think I was sort of born with it, but I do have a sense that the world ... there's a Hebrew phrase. It's called tikkun olam, which means repairing the world or healing the world. I think it's something that just kind of got in my DNA. Also I studied Buddhism back in college and the whole notion of compassion and understanding the way that our ego gets in the way of our actually being in the world to create love and connection and change and growing and learning that it sort of shaped what I do and everything I do.

Dave: Tell me about what you did in Haiti.

Mark: Well, like everybody else I saw the news of the earthquake and I'd just finished reading a book about Paul Farmer who revolutionized care in Haiti in the poorest place on the planet in the Western hemisphere. He created an extraordinary impression on me through that book. Then the earthquake happened in Haiti and a series of events happened that allowed me to put together a team. A patient with a private jet flew us down and we were the first on the ground in the hospital in Port-Au-Prince and delivered trauma care to the 300,000 people who were injured and there were 300,000 dead.

Mark: And through that process I began to think about how we need to apply a different model of care to chronic disease because I was shocked to learn that the major diseases in the hospital weren't malaria or TB or AIDS, they were heart disease and diabetes and hypertension and kidney failure and I was "Whoa!" And then I began to realize that these are social diseases and we need a social cure and finally that led to me developing a program with a faith-based healthy living curriculum in a church in Southern California, Saddleback with Rick Warren where we got 15,000 people to lose a quarter million pounds by doing it together in groups and supporting each other and loving each other. I kind of call it the Love Diet.

Dave: There are somewhere around a quarter million people who will hear this episode. We're about to cross 100 million downloads this year and some of them, they've got it. They've been doing this for awhile. They're kicking ass and there's a big group of people who are saying, "Maybe I think this is possible, but I'm not there yet." What I want you to share with people today is after all of this time doing that amazing first responder drop everything show up where there's a disaster and be a doctor and watch what's happening, from that perspective and also just from seeing the thousands of patients that go through Altar Wellness Center, what can the people who are almost there, if they're on the path to just having limitless energy and having no pain in their bodies and having brains that work as much as they want them to, what can you share that's just critically important for those people? They've taken a first step. There's another step coming.

Mark: Well, I think, it's important for everybody to ask themselves what matters to them. What they care about. What they want for themselves, for their life, for their way of being in the world and connect to that because that leads to a whole series of decisions and behaviors that actually allow you to make choices to enhance your health, to improve your wellbeing and be curious about how do you live a more powerful integrated life where you inhabit your body, you inhabit your mind, you inhabit your emotion life in a way that creates power and energy and vitality and impact and that you're able to show up in your life and love your family and love your partner and be engaged in the work that you do. Do all the things that really matter for people instead of walking around like zombies in a brain fog.

Mark: I just ask people to check in with themselves and ask them what really matters. Connect with that and then what are the decisions that flow from that?

Dave: So it's sort of the why you do what you do?

Mark: Yeah.

Dave: And that actually leads you to make better decisions with good.

Mark: Yeah.

Dave: When you were writing Food Farmacy, you touched on some stuff that's really important to me.

Mark: You mean "Food, What the Heck Should I Eat?"

Dave: Ah, yeah. Sorry.

Mark: Doctors Farmacy with an "f".

Dave: Yeah.

Mark: Is my podcast.

Dave: Clearly, I need some more bolder coffee.

Mark: It's late in the afternoon. We just had some sushi. It's okay.

Dave: Yeah, we're at a conference, actually. The Archangel Conference recording this live, so there may be some background noise as well and we've just spent a few hours hanging out and chatting. So it was a great time to sit down and pick your brain some more for our listeners.

Dave: When you were writing "What the Heck Should I Eat", you talked about not just what food does to people, but what food does to the environment around us.

Mark: Mm-hmm (affirmative)

Dave: And Kimball Mosco was on the show and we talked about his work in that space and how there's a revolution in grass-fed agriculture and fresh and local. What are the bigger impacts other than what you get in your brain from what somebody eats? What are the bigger impacts that you discovered when you were writing your book?

Mark: Well, the podcast, The Doctors Farmacy came out of things that I learned, that I knew about, but really got into in writing the book, "Food, What the Heck Should I Eat?" Which is that food matters to everything that matters. It matters to our health. It matters to the economy. It matters to the environment, to climate, to social justice issues, to poverty, to violence, are kids going to be able to learn, even national security and most people don't connect food to all these things, so how does that work? So I began to unpack that and I'm writing another book that really goes even deeper into this. I include somewhat in the book, but food, clearly it causes chronic disease. It's the Number One cause of our chronic epidemic which affects one in two people. One in two people have pre-diabetes or Type II diabetes. It also clearly affects the economy. Medicare, Medicaid are the biggest drivers of our federal deficit and by 2040, 100% of our entire federal tax revenue will be required to pay for Medicaid and Medicare at our current rates.

Mark: It's bankrupting businesses. Starbucks spends more on healthcare than on coffee. GM spends more on healthcare than on steel. So it's really troubling and in fact, globally, there's going to be \$47 trillion which is the GDP of the six largest nations combined will be spent on chronic lifestyle-preventable disease in the next twenty years, so economic burden.

Mark: And then environmental stuff and I didn't really understand the global impact. I did know that one-fifth of our fossil fuel is used for growing food and transporting the food for human consumption. I did know that industrial factory farm animals contribute methane and carbon in the environment. I did understand those things, but I didn't really grasp the fact that the food system as a whole is the Number One solution for reversing climate change. That we can draw down carbon in the environment to pre-industrial times by dealing with food waste. 40% of our food is wasted and that goes into landfills and creates methane.

Mark: We use tilling in the soil which causes soil erosion. We've depleted tens of feet of topsoil in America. We've had so much, thank God, but we're mining our soil. Within fifty years, we're not going to have any soil.

Mark: We're using the agricultural methods that allow this erosion instead of actually building soil which can then sequester and hold carbon.

Mark: We're not using regenerative agriculture practices. We're not using regenerative and restorative practices for animal husbandry. We can use regenerative grazing practices to take down carbon as well and factory farms are one of the biggest contributors to climate change and methane. So all these things together can have a huge impact.

Mark: Then you look at just the environmental degradation, the run offs from nitrogen in the waterways is causing dead zones because the nitrogen fertilizes the algae and it suffocates all the fish and the animals in the lakes and rivers and that goes to the ocean. You have a dead zone the size of New Jersey in the Gulf of Mexico and all the pesticides and the GMO glyphosate as Roundup made by Monsanto for soybeans. It's sprayed on all our wheat products even though they're not GMO because it exfoliates them before harvest and they were just fined \$289 million by a court in California because of the fact that they found it caused cancer. That they knew it from their internal records and that they denied it and they got punitive damages of \$250 million, with 5,000 similar lawsuits going on now around Monsanto.

Mark: So environmental degradation, climate change and then poverty and social justice. Most people don't understand, but the food that we eat affects our behavior. It's affects our mood, our cognitive function. Violence, we know for example from studies in prisons, with violent prisoners, if you give them a healthy diet, you reduce violent crimes in prisons by 56%. If you add a multivitamin, it reduces it by 80%. They're nutritionally deficient.

Mark: Dave, I remember I was in my office one day and I got a handwritten letter from a prisoner in prison who said "I read your book Ultimate Metabolism." This was 13 years ago and he said, "I realized that my violent behavior was a direct result of the food that I was eating and I feel like a different person right now" when he changed his diet. So we see violence.

Mark: We see the cycle of poverty and disfunction. You look at the developmental effects of a poor diet and process food and sugar and additives on kids and their brain development. They can't function in school. We know that there's an achievement gap that kids who are in school and going to breakfast with soda and Doritos or flaming hot chips, they can't focus. They can't function and when you change that, it transforms them.

Mark: I remember talking to this guy who started a charter school in Washington, DC in one of the poorest areas of the city with these disadvantaged kids, all on welfare, eating garbage and he fed them three meals a day. These kids are now going to Harvard and

Yale and all the white kids in the other neighborhoods want to send their kids to this school. So it's a profound effect on our kids and behavior.

Mark: And even national security. We now have 70% of our military recruits ... I met with General Jack Keane who was the head of Desert Storm in the Army Division, the tanks and he told me, "Mark, we have 70% of our military recruits are not fit to be accepted into the military." So we have across the spectrum of our society, everything that matters: health, the economy, climate, national security, environment, kids, education, poverty, social justice, violence.

Mark: I mean we know from records that have been released through FOIA, emails from Coca-Cola and other companies, that they are deliberately targeting the poor. I was asked to give the speech at the anniversary of Martin Luther King's death in Harlem at the Riverside Church. Governor Cuomo was there and others and I got the last speech and I was sharing about how our food system is a system of oppression that keeps the poor down and disadvantaged. It's a vicious cycle, so we really have to look at food in a much broader context than our own personal choices and our own health, which is important, but it really matters. What you put on your fork everyday is the single most important thing you do to affect yourself and the world around you.

Mark: It's empowering because if what I'm saying is true, and it is,

Dave: It sure is.

Mark: If it's true, then the implications are we, as consumers have choice.

Mark: I had breakfast with the CEO of Nestle's the other day in Canada who used to be the President of Food in the US for Nestle's and it was remarkable how the consumer movements around food are driving their decisions and behavior.

Mark: For example, they stopped being part of Grocery Manufacturers of America.

Dave: Yes.

Mark: Which is a trade association of all the big food companies.

Dave: That was a Monsanto front group. It's not?

Mark: Well, no. But we were talking because he said that "We decided to quit that group because they were trying to slow, by opposition, any positive change."

Dave: Yes.

Mark: They were trying to oppose GMO labeling. They were trying to oppose a soda tax. They were opposing things in ways that were often illegal and they actually got fined for what they were doing through a lawsuit. I think like \$17 million and then a bunch of

companies, Unilever, Campbell's, Nestle's all jumped out of that and created a new alliance to actually move things forward.

Mark: He told me the things that people don't even know that they stopped marketing foods to kids, which is phenomenal, but people don't know about it. They're starting to do regenerative agriculture. They're looking at nutrogenomics. They're changing the product formulations. They're fighting regulations that prevent them from reformulating their products like Lean Cuisine which has to be low fat, which they don't want to be anymore.

Mark: So our choices matter and these companies change their behavior based on what we do, what we buy and what we say and think.

Dave: That is so ...

Mark: Sorry. That was a long speech.

Dave: No, but it's all real.

Mark: That was my short version.

Dave: Right. I've met with presidents from some of the larger companies as well and they're worried because what they used to do, they could tell themselves "Oh, this is good for people. Sugar water, yeah, no problem." But the sales are dropping because people are paying attention. They're hearing your work. Reading your work. Listening to podcasts and things like that and saying "I'm just going to change my behavior for me, but the impact of doing the right thing for you is that if no one will buy the crap, no one's going to try and sell it to people who don't know any better."

Mark: Yeah.

Dave: And we're seeing a bigger shift in the last three years than I ever imagined would happen in that period of time.

Mark: Yeah.

Dave: And in large part it happens because of spending, but it also happens because you come at this from a just impeccable, highly-credentialed, high-experienced, credible mindset.

Mark: I didn't tell you I got my medical degree online? I paid fifty bucks and I got it. I didn't tell you that?

Dave: But you walk in there and you talk with them and it's not the 1970s "coconut oil is a deadly poison" kind of BS. That maybe caused their product strategy a long time ago. So I feel like now is the time to do it.

Mark: But what's also interesting is the food companies responded to the dietary guidelines.

Dave: Yes.

Mark: So they were only doing what the government told them to do. Eat low fat. Take out this. Don't put in that. Less salt. And they were just responding to try to do the right thing and there were all these unintended consequences.

Mark: And I'm not defending the food companies because there were some intended consequences.

Dave: Oh, yeah.

Mark: And some of their behavior is egregious. For example, targeting minorities by Coke and so forth, but the fact that these big monsters are changing their behavior based on what we do as individuals is something I want everybody to understand. You vote three times a day with your fork and that matters. And what you eat matters. And where you buy your food matters. And how you make choices around what you're eating is enormously important.

Mark: And these companies then have the power. Walmart says "We don't want trans fat in anything." All their vendors have to change because they're one of the biggest outlets for their product. Or they say "We don't want as much cardboard in packaging." If these big food companies, big ag companies, "We don't want you to have GMO" or "We don't want you to make high fructose corn syrup in everything." And they'll start to change what they're doing.

Mark: If we want regenerative agriculture, if we want organic and right now, we need those big companies to help push the marketplace because unless we actually realize that the way things change is by scale, it's not going to change. In other words, if the biggest food company in the world says to their agricultural producers "We only want regenerative agriculture. We want you to change your soil practices. We want no-till farming. We don't want you to use these drugs or these ..."

Mark: I went to this conference once. It was an ag conference. I don't know why they invited me to speak and this guy I sat next to was ... I said, "Well, what do you do?" He said, "Well, I'm in plant medicine." I'm "Plant medicine? What do you mean?" He's "Yeah, we make pesticides."

Dave: Well, that's not what I thought.

Mark: The other guy that was sitting next to me was Mr. Cargill.

Dave: Wow!

Mark: I was "Okay, what's going on here? Who invited me to this party?"

Dave: The fact that you're willing to go to those parties and crash them is one of the reasons ...

Mark: I was invited. I wasn't even crashing.

Dave: You can just tell from [inaudible 00:21:12], you're one of the game changers and that's why I included you in the new book because I want people to know what's going on inside your mind and the habits and things that you do. Your story is in there, the laws about how people behave and the book, Game Changers is on Amazon for pre-sale right now. So I'm going to dig a little ...

Mark: It's pretty awesome.

Dave: Oh, thank you. I want to dig a little bit deeper into what goes through your mind when you're sitting down next to Mr. Cargill and Mr. Pesticide. I mean do you get pissed off at these guys? Do you feel sorry for them? What's up?

Mark: It goes back to your first question which is I lead with love.

Dave: Okay.

Mark: And compassion.

Dave: You always show up that way, wherever I've seen you. Okay.

Mark: And these are human beings.

Dave: Yeah. Exactly.

Mark: Everybody's a human being before they're Republican, Conservative, whether they're Monsanto or whether they're Whole Foods. They're all human beings and they have their beliefs and their attitudes and it's fine. We might disagree but I always lead with building a heart connection with somebody, an authentic relationship and having a real conversation and inquiring and asking instead of grandstanding and [inaudible 00:22:25] with my beliefs. I'm curious. "What is this for you? What do you think of this? What about these issues? What about this fact?" And we start to have a dialogue and it's a dynamic, engaging, real conversation.

Mark: I don't have any illusions that they are necessarily going to agree with me or do anything to change what they're doing, but a lot of it for me is being curious about how do they think. Right? What did Lincoln say, "Keep your friends close but your enemies closer."

Dave: Right.

Mark: I don't [inaudible 00:22:55] with my enemies, but I think, I don't know what the number is exactly, but I think it's like an \$18 trillion global food industry and it's the biggest industry on the planet and it's not going away, so we have to figure out how to push it in the right direction.

Dave: And hating on it is not a push in the right direction.

Mark: No.

Dave: My experience with these people is when I first started getting to know people who are running really big billion dollar plus food things, making decisions, and as Bulletproof's growing, I realize so many of the things that I want to do, there are regulations preventing me from doing it.

Mark: Right.

Dave: And that is not cool and none of us like it and even the companies who are doing what I would consider nutritional harm and environmental harm to the world, when you talk to the executives, they do not "Oh, yeah, we're doing that! Ha, ha, ha! But we're rolling in the bucks." There's no mindset like that. They believe they're feeding the world. They believe they're doing the right thing because they have the facts wrong. So it's changing their mindset, but when they change their mindset, most of them have kids and grandkids. They want to create that same kind of a world, so it's just a matter of getting the knowledge that we now have into their hands, letting it soak in and creating a world where "Well, if you don't do that, no one buys your stuff, so you have to do the right thing."

Dave: One of the areas that I'm most passionate about is in grass-fed agriculture.

Mark: Yeah.

Dave: Because ...

Mark: Dave, did I tell you I'm thinking about starting a grass-fed ranch in Colorado?

Dave: Are you really?

Mark: Yeah.

Dave: I have four sheep and two pigs on my small organic farm and I can tell you where the sheep poop, the grass is insane and where the sheep don't poop, the grass is okay. There are people that say "Well, you can't eat animals. It's bad for the environment." Eating industrial animals is unethical. It tortures the animal. You're going to get toxins from glyphosate. You're going to get all sorts of bad stuff. It's bad for the world. And if you do that, you're supporting, you're voting with your dollar to say "Please destroy more topsoil. Please overgraze. Please do all the bad things that happen when we have corn and soy-fed animals, but if you're eating less meat, which is good for you, but not no meat and super high quality grass-fed local stuff, you're now decentralizing agriculture. You're creating healthier soil in more places on the planet and ...

Mark: You're restoring ecosystems.

Dave: Yeah.

Mark: And sequestering carbon.

Mark: And what I didn't realize is that we drain 1.3 trillion gallons more every year out of the Ogallala Aquifer which is the biggest aquifer in America that basically irrigates the entire agricultural basin in the Midwest faster than it's being replenished from rainfall and so we're going to run out of water and soil in 50 years. When you actually change the form of agriculture to no-till which means you don't dig up the soil so it erodes and you use regenerative grazing practices, you actually sequester carbon and you sequester water.

Mark: The reason we're having droughts and floods is because of how we farm.

Dave: Yes.

Mark: And putting the water back in the soil and putting the carbon back in the soil creates a sustainable model of food production for the next thousands of years.

Dave: We didn't learn from the Dust Bowl which happened in the 1910s, 1920, somewhere around there and we destroyed a bunch of our topsoil and we've been continuing to do it, but now we spray poison on top of the soil.

Mark: You know what happened with the Dust Bowl, they killed 60 million buffalo.

Dave: Yeah. They got rid of the animals that poop on the soil.

Mark: Yeah and then they started the agricultural practices that lead to this.

Dave: And it's happening again, but when we make a decision to say "I'm going to go to the farmer's market and buy a couple pounds of grass-fed beef that supported my local soil. Less fuel was used to feed it. Less fuel was used to transport it. No environmental destruction happened. No bunnies lost their homes because of a big tractor making soybeans [crosstalk 00:26:51]

Mark: Fertilizers for the soybean and the corn, all those things.

Dave: The Definition of Bio hacking when I wrote it was changing the environment around you and inside of you, so that you have full control of your own biology and it's easy to think about taking a bite of food and changing the environment inside of you because that's a big thing to do, but when you realize that there's secondary impacts on the environment around you, you choose food that might make you okay, but that lessens the environment around you. Over time, your performance will necessarily decline.

Dave: So top three things people can do if they want to do something that makes them have more energy and supports the environment around you?

Mark: Wow! Top three things. I thought you were saving that for the end.

Dave: No, this is my first of 50 top three things.

Mark: Okay, so in terms of your personal health and environmental health and climate change, economic health and social health, the aspiration is to eat in a way that restores your health, restores the environment, restores our social fabric and that means eating real food. It means eating minimally processed food or non-processed food. It means being conscious about how your food is grown, when you can. You can't always be perfect, but if you can as much as possible eat food from local organic farms, from no-till farms. If you can eat regeneratively grown animal food. If you can understand the linkages between these things, you're going to restore your health. You're going to restore the health of the environment, the climate, the economy, improve our social fabric, reduce social injustice, just by what you put in your mouth.

Dave: Mark, earlier I mentioned Game Changers, the new book and boiled down 46 laws of people who perform better and what I found from looking at the data from asking that question you just mentioned, there was sort of three big buckets that people who did world-changing things did. They wanted to be smarter. They wanted their brains to work better. They wanted to be faster. They wanted the rest of their biology to work really well and to get the things done and they also wanted to be happier.

Dave: The data was really conclusive that the people who are happier and actually work on their happiness perform better. You can find the book. You just Google or go to Amazon and search for Bulletproof Game Changers and you'll find the book.

Dave: But of those three things around being smarter, being faster, being happier, what do you do for happiness in your own life?

Mark: That's a great question and I think it may sound esoteric but the reason that most of us suffer is because of our beliefs and what they lead to in terms of our perceptions of any situation and what that makes us feel like.

Mark: Often our beliefs are determined by experiences and things that we've had that we generalize to everything. For example, when I was a kid, I had a stepfather who had a rage problem and one day I was seven or eight years old, my mother said, we didn't have garbage disposals back then, so she said, "Take the soup that's left over and throw it down the toilet." And my stepfather was a clean freak and I threw the soup down the toilet. I flushed the toilet and walked out of the bathroom. He was "Did you wash your hands?" I'm "No." Because I just flushed the soup down the toilet and I told the truth. And he went into a rage. He picked me up. He threw me across the room against the wall.

Dave: Wow!

Mark: And it traumatized me so that I learned that it wasn't safe to tell the truth because I would get in trouble.

Dave: Wow!

Mark: And unpacking that and understanding that and saying but there was another explanation for that. The explanation was that he was a rage-aholic. That he had an anger problem. That he was a clean freak. That in that situation that's what happened, but that's not necessarily how everyone and everything is going to react. Once I began to realize that, I was "Well, I can be more direct. I can be more honest. I can get rid of that belief that was causing me to have relationships that didn't go as well as I'd like because I wasn't able to say what I really felt or thought or needed." That's just one example.

Dave: How old were you when you figured that out and unpacked it?

Mark: When I really did?

Dave: Yeah.

Mark: I mean I knew it, but the behavior was so ingrained. It was really only until the last few years when I worked with someone who helped me unpack my beliefs. It's this woman named Shelly Lefco. She's got this crazy little practice of belief work.

Dave: Yeah.

Mark: And it's so powerful and I think from a Buddhist perspective, we know that your suffering is directly related to your perception of a situation and what you believe about it, whether it's true or not and so working on that level of your beliefs is a powerful way to get happy.

Mark: The other thing that is really important is this notion of service. Most of us are out there doing things for ourselves, trying to get ahead, trying to make ourselves healthier and ourselves smarter and ourselves faster, ourselves happier, but at the end of the day, the science really shows that when you serve others, when you are altruistic, when you are engaged in helping others, that it creates more happiness, more pleasure, more fulfillment.

Dave: Yes.

Mark: And that building the social network and the social relationships and the connections. Not "What can I get from so-and so?" But "What can I give to so-and-so?" And I know you do that. I do that. We both do that.

Dave: Yeah.

Mark: And actually it's a much happier life. So what's the secret of happiness is parking your ego at the door, being of service and working on your beliefs.

Dave: Those all showed up consistently among high performers in the dataset behind Game Changers and so those are parts of different laws and the idea is there's 46 different laws that everyone does so you can prioritize where you want to put your energy first.

Dave: But you said something that's super profound. You're 50 something?

Mark: 58.

Dave: 58, all right. So you went 55 years ...

Mark: I know. I'm a slow learner.

Dave: No, you're not. You've written 11 New York Times bestsellers. You've changed the face of functional medicine and you're causing great good in the world and you were still running on programming that happened when you were a child.

Mark: Yeah. I mean I worked on it for years.

Dave: Yeah.

Mark: And I'd gotten better at it, but until I really unpacked that story, and that's just one example and I have many, many of those.

Dave: We all do!

Mark: And I was actually able to free up and "I'm okay". The less I do for me, the more I do for others, the more I kind of let my, I don't know what the word is, not personal needs, but it's like my ego at the door and just show up and just be love and just be kind and just serve, things work out and if I am doing something that it's not usually for me.

Dave: Yeah.

Mark: This book that I'm writing about the food system or the podcast I do or the work I do at Cleveland Clinic or the work with my patients, it's all about what can I do for you.

Dave: Yeah.

Mark: And then it feeds me. It comes back a thousandfold.

Dave: If you write a book for yourself, no one's going to want to read it. That's just how it works.

Dave: And the reason it's so profound that you can talk about that is that everyone listening to the show, and me, too, I had lots of the stuff I had to work through on my own patterns, you learn these lessons before you can think about them and then they just show up in your decisions, in your relationships, in your business, with your friends, in everything you do and they're entirely invisible. When did you first know? So you really got through this a couple of years ago, when did you first go "Wow! This is an issue for me"? Were you twenty? Were you thirty?

Mark: I probably was in my thirties, maybe when I first realized it, but there's different things that have happened.

Dave: Yeah.

Mark: There's a few things that have happened that for me personally that have really effected my way of being and my belief in myself. They were epiphanies that happened in my life, in different circumstances, that I didn't really learn. They just were lessons that showed up.

Mark: One was when I was eighteen because I was kind of a weird kid and I was a little nerdy and I read books and didn't have a lot of friends and people made fun of me. I went out west after high school and I was backpacking and I was camping with these guys. They were kind of making fun of me and I would get very hurt. I was very sensitive and then I just had this epiphany that maybe in what they're saying there's a nugget for me to learn and reflect on or it's their own nonsense and bullshit and they just have to work through and I just have to have compassion for whatever their issue or suffering is and that was huge.

Mark: The second thing was probably about four or five years later I remember being a little anxious about what was happening in my life, what was going to happen, how I was going to figure out or whether or not this was going to happen and I just remember having this moment, this epiphany, where I just realized that if I reframe my way of being to trusting that everything was going to work out, that I would be better off. That I just could literally have this sense of faith that everything that was happening to me was the right thing in that moment, even if it wasn't great. It was some part of the path and I can look back now fifty years and I can go "Oh! I get how everything's connected." In retrospect, to understand the linkages between all the events of my life that led to who I am in this moment is exactly what I want to be doing and where I want to be. So that was the second thing.

Mark: The third thing was sort of realizing that, and this came a little bit later because I think early on I was sort of out to prove that I was okay and prove that I could be successful and prove to my dad and do all the things that we often do, and once I sort of got out of my own way and I go "This isn't for me. I'm not here to serve me. I'm here to be of service in the world and to love and just show up," I don't get stressed at all anymore.

Dave: Yeah! The stress goes away.

Mark: I never get stressed and I'm in the most awful situations and think people ... the most horrible things are happening and I'm ... sometimes there's some personal thing with a family member, I might get a big feeling, but most of the time, and my wife's "How? With the plane we missed or when this happens?" I'm "Whatever. It's all going to work out." And I just don't have connection to anxiety around worry and stress.

Dave: None now, but you did before.

Mark: I did, yeah. I did and last year I got really, really, really sick and I think it even took me another level deep into it.

Dave: I was worried about you.

Mark: Yeah, Dave you were helping me. I appreciate it. I'm "Dave, what do I do? I'm dying." I'm a skinny guy. I'm 6'3, 185 pounds and I was down to 157 pounds, almost 30 pounds lighter. I couldn't work. I had rip roaring inflammation throughout my body and my colon was completely inflamed from top to bottom. I couldn't really eat. I was nauseous. 24/7 pain that was unrelenting in my gut and I couldn't think. I couldn't focus. I couldn't work. I literally could go from my bed to the bathroom, back and forth, twenty times a day.

Mark: And I didn't have my brain. I didn't have any emotional capacity. I didn't have my body and I was actually okay with it all and I was peaceful within it because I felt like I had this sense of who I was in a spiritual way that was this sort of ever-present eternal part of myself that I was resting in. I just was surrendered in that state and I didn't know if I was going to die. I didn't know if I was going to live. Many people thought I was going to die and I realized that there's no reason to worry about anything. I could just be in the peace of just being in that experience and it sounds crazy, but I wasn't fighting it and I just surrendered to it and that surrender is really how I live my life. I don't know what's going to happen next. I don't know what's going to show up, but I pay attention and I look at the signs and I watch what comes into my life and who comes into my life and then I go with it.

Mark: It's like that ... I talked about it on my podcast with Michael Beckwith, but it's like that joke about the guy who's drowning and he's praying to God to save him and this boat comes by and he's "No, no, no. I'm waiting for God." And a submarine comes by and he's "No, no, no." The helicopter comes by with a rope and he's "No, no, no. I'm waiting for God." And then he dies and drowns and he goes "God, why didn't you forsake me?" He's "What do you mean? I sent a boat. I sent a plane. I sent a helicopter, a submarine."

Mark: I think it's important to be alert to what's actually happening and those are the lessons for me, and it may be different from everybody else, but it's really helped me surrender, to drop my ego, to be in love and compassion, to be honest and truthful in my relationships and experiences and to just trust.

Dave: It's amazing that we can go from talking about food and social injustice to what ...

Mark: That was soul food we were talking about.

Dave: It was, but the ability to speak your truth even though you got programmed early on to not speak your truth and to walk the path that got you there . By sharing that and just being vulnerable enough to do that as a smart leader in different fields, I'm hoping that that inspires listeners to say "Well, if a guy like Mark had to go through that stuff" whatever they have gone through in their own path probably isn't nearly as bad as they

think it is and if they haven't dealt with it and they don't, they will not show up in the world where they can.

Dave: A big motivation for me in starting Bulletproof was that I wanted to write down all the stuff someone should have told me when I was twenty.

Mark: Yeah.

Dave: And food like you said ...

Mark: When you wrote Game Changers, you mean?

Dave: And when I started Bulletproof, the blog and started doing the podcast and Game Changers is the analysis of what 450 people have said matters most. That's data driven and quantified and turned into rules and little actions you can take as well as little questionnaires and quizzes that tell you whether you should do this first or do something else first, but where do you focus your effort to become a better higher-performing human being instead of saying "I'm going to copy that one guy". Because you're not that one guy, but if everyone agrees on something ... by the way, everyone agreed on food first, but ...

Mark: [crosstalk 00:41:38]

Dave: Yeah, of course, because it's such a thing ... it's a linchpin for everything that happens in and around you.

Mark: Yeah.

Dave: But it wasn't just that, it was that if someone would just have told me in a way I could understand this, maybe I would have looked for my own bad beliefs, the ones that you talked about, way earlier in life instead of just walking around and acting like a jerk.

Dave: And your story about the guy in prison who changed his life, when I first lost my first 50 of the 100 pounds I've lost, I was in my early 20s and ...

Mark: Where did you lose it? You want me to help you find it?

Dave: No. It can stay wherever it went.

Mark: Was it in a McDonald's that you dropped it?

Dave: I certainly tried it there. That didn't work.

Dave: But I accidentally went gluten-free and I was ...

Mark: Accidentally!

Dave: I didn't know about gluten back then, but I was trying to eat more protein and less carbs, so I just cut out grains and when I lost that 50 pounds, it took about three months; the other 50 took years to figure out all the other details, but my personality changed. Because I'd always been, I have really developed muscles in my middle finger and I was an angry ... I didn't know I was actually anxious. I was really anxious and just pissed off all the time. I just thought that was kind of my normal state because everyone around me was so stupid, obviously.

Dave: Even my parents were "Dave, ..."

Mark: It was everybody else's fault.

Dave: Of course, it was, right? And my parents were "Dave, your personality just changed. We like you better." I was "Wow!" No one had told me this! I didn't want to walk around being an asshole and I probably felt guilty about it.

Mark: I can't say the name of this guy because he's a very famous guy who was known to be a prick and really awful personality and abusive, but a very high-level government official and I changed his diet. He lost 50 pounds and one of his friends as we were walking to dinner together, another very prominent guy and he's "I don't know what you did to him, but he's like a whole different person. He's so nice now."

Dave: It's really funny. I don't know if he'd allow me to say his name on the air. I'm not going to. You know who I'm talking about. A very famous band. They invited me to come backstage in Portland with them and they've been drinking Bulletproof Coffee on tour and they said, "Why don't you come on the bus and make us some coffee. We want to hang out." I'm "This is amazing! I'm actually hanging out with rock stars!"

Dave: And the band says, "Dave, thank you for Bulletproof Coffee." I said, "What do you mean? You like it?" They said, "Oh, we like it, but the reason we like it the most is that our lead singer is so much nicer to tour with. He's a nicer human being." Because on tour musicians just get beaten up by constant travel and bad food, so by doing this, he actually was nice to his band members in a very different way.

Dave: But our personalities will change from food and when you do that, those feelings of compassion that you talked about, those feelings of service, it's much easier to have them when you're not pissed off.

Mark: That's right. Exactly right. I mean that's an important point. In order to achieve a higher level of being that makes you happy, you have to clear out all the garbage. You have to eat right. You have to exercise. You have to sleep. You have to meditate or do some form of restorative practice. You have to do all those things foundationally and then your body can actually respond.

Mark: I always say it's very hard to be enlightened if you're mercury poisoned or you're pre-diabetic or your thyroid's not working or you have gut flora that's messed up. It's much harder to be awake and at the end of the day, that's what we all want: happiness, be

awake and be fully inhabiting our lives in a way that's powerful and engaged and is game changing.

Dave: Wow! Nice plug there! Thanks, Dr. Hyman.

Dave: Instead of asking you the top three questions that you've answered before, one final question and you can make the answer short, what is the world of medicine going to look like twenty years from now? Just paint me a very brief picture of it.

Mark: What I think is actually happening is a massive paradigm shift. There are a couple of forces happening. One is payment systems are changing, so that means that doctors and healthcare systems will get paid for getting people healthy, not treating people when they're sick. It's called value-based care.

Mark: And the second is that the scientific paradigm is changing. So we have the economic paradigm and the scientific paradigm and the scientific paradigm is changing because our understanding the body in a revolutionary new way with the advent of systems biology, with the advent of artificial intelligence and Big Data and it's forcing us to rethink disease based on what the root causes are, how the environment interacts with our genes to create who we are which is all of your work. It's understanding things like mitochondria and gut flora and inflammation and toxicity and nutrition. Things that are really absent from medical practice right now will be the standard of care.

Dave: Within twenty years.

Mark: I hope. I'm trying to make it faster. It might be longer, but it's inevitable. It's happening and it's being disrupted in many ways outside of healthcare. I just found out from somebody who sold their company to PayPal for \$600 million that was a digital wallet that paid out all kinds of people for different things and they had different clients. One of them was Google. They have 300,000 people they're paying for doing medical research every month.

Dave: Wow!

Mark: What is Google doing? It's not a healthcare system. How is it doing medical research? What is it doing? Why are they paying 300,000 people to be part of medical research every month?

Mark: That's the kind of stuff that's happening and it's disruptive and it's exciting and it gives us the potential to leapfrog ahead of what we're doing. It's like going from the abacus to the iPhone and I think we're going to be seeing that happen more rapidly than we think.

Dave: Thank you, Mark. Thank you for your work. Thank you for your podcast, the Doctors Farmacy. See I got the name right.

Mark: You did!

Dave: Spelled with ...

Mark: F-a-r-m-a-c-y. A place for conversations that matter. You're going to find it on iTunes and anywhere you find your podcasts.

Dave: It's if you like Bulletproof Radio, you'll love Mark's show. I've been guest and if this was an interesting interview for you, check out Game Changers. Just go to Amazon. You can pre-order it. Just search for Bulletproof Game Changers and you'll find an awesome book and hear more from Mark in there.

Dave: Mark, thanks again.

Mark: I got the book. I got a pre-copy. It's awesome, really. If you want to know how great people do great things and are happy, check it out.