

THE MODEL HEALTH SHOW

EPISODE 552

The Shocking Truth About Drug Companies & How They've Destroyed American Health Care

With Guest Dr. John Abramson

You are now listening to The Model Health Show with Shawn Stevenson. For more, visit themodelhealthshow.com.

SHAWN STEVENSON: Welcome to the Model Health Show. This is fitness and nutrition expert, Shawn Stevenson, and I'm so grateful for you tuning in with me today. On this episode, we're going to take a deep dive into United States healthcare system. We're going to take a deep dive into our existing pharmaceutical industry with a person. He is the foremost expert on this subject matter, and I'm grateful to call him a friend, Dr. John Abramson. And recently, he's become one of the most sought-after voices and experts in this subject matter of getting folks educated about how our healthcare is constructed and the integration with pharmaceutical companies, and at the end of the day, looking at the results that we've seen, with our health as United States citizens.

Dr. Abramson has served as an expert in pharmaceutical litigation, and also, he's worked as a consultant to the FBI and the United States Department of Justice. And one of the most startling things that he shared with me is that the United States is spending far more money on healthcare than other wealthy nations. We're talking about in excess of 1.5 trillion dollars, and yet we have the worst health, the worst health outcomes, the most diseases, chronic, mostly lifestyle-related conditions than all other wealthy nations that were analyzed in the data. So, it's this paradox. We're spending the most by far, 1.5 trillion extra. And to articulate this, this is what he shared in his new book: In 1980, US healthcare spending was just slightly above average of 10 comparable countries. And the age-adjusted death rate for Americans was lower, which was better, was actually a bit lower than the average of those other countries. That year, 88,000 fewer Americans died than predicted by the average death rate in those countries. So, the United States was doing pretty good. But by 2017, despite our healthcare spending having surged and being the extreme outlier, again having an excess of these other countries of 1.5 trillion dollars more being spent on healthcare, our death rate has increased so far beyond the others that nearly 500,000 more Americans are dying each year. 488,000, if you calculate the numbers down to a T. And Dr. Abramson has the receipts. And that's what he's talking about today. This is more than 1300 deaths every day, in excess of the number predicted by the average death rate of other countries. Here in the United States, we're losing about 1300 more people a day from largely preventable chronic diseases.

Now, you would think that with an excess of over 1000 people dying in the United States every day, that this would be headline news. This would be top of mind for the average person to consider to have this bit of data because this isn't happening in other places in the world. But this is the reality that we're existing in, and the good news is that we can change it. Today we're going to look at what the real situation is and actually how do we get into this situation in the first place. And I'm telling you, this story is riveting and it's going to be layered with fact, on

top of fact, on top of fact, and this is one of the most important episodes and conversations in general that I've ever had, and I think you're really going to get a tremendous amount from it. And this is definitely one that's going to stick with you for a long, long time. And speaking of a long, long time, I like to look at some of the peer-reviewed evidence that we have relating to things that humans have been using for a long, long time. I'm talking centuries, I'm talking thousands of years. In some instances, things that we know have a great proven resonance with the health of the human body. Now, one of the immune system supportive things that I do actually dates back to the Ancient Greeks, Romans and the ancient Egyptians. And they were well aware of the healing power of propolis and its extensive use as a medicine. If you're like, "What is propolis? Is that like Metropolis? Is that like where Superman lives?" No, propolis is a well-renowned product from bees and has remarkable anti-viral effects. Listen to this, a study published in the peer reviewed journal, Antiviral Chemistry and Chemotherapy.

This is a journal that is looking at science and resources regarding cancer and cancer therapies, so in this peer-reviewed journal, they revealed that bee propolis has significant antiviral, effects specifically in reducing viral lung infections. Isn't that kind of helpful right now? Even stretching this out further, looking at something that seems to not have really good solutions, a recent study published in Phytotherapy Research found that topical... So, adding on the skin, topical propolis applied three times a day, accelerated the healing of cold sores. The researchers found that topical propolis not only reduced the amount of herpes virus present in a person's body but also protected the body against future cold sore breakouts. Isn't that an important bit of data for folks to know? So, on top of that, a meta-analysis published in Evidence-based Complementary and Alternative Medicine found that propolis has anti-viral, anti-bacterial, anti-fungal, and anti-tumor properties functioning as an immunomodulator that increases the body's resistance to infection.

And propolis treated patients showed a reduced incidence and severity of conditions like asthma and allergy symptoms. What's one of the reasons it's so remarkable? Well, it has over 300 active compounds. The majority of these compounds are forms of antioxidants, specifically polyphenols, that are well documented to reduce inflammation and fight disease. Even more specifically, polyphenols have been proven to inhibit the activity of coronaviruses according to data published in the peer-reviewed journal, Archives of Virology. So, if we're talking about science, if we're talking about stacked up and its effectiveness, we've got to give attention to this remarkable bee product called propolis. Now, you can run out and try to find some propolis on the streets, but I guarantee you, you're going to have issues with the majority of these types of products, with pollution, because right now it's common to find things like pesticide residues, E. Coli, salmonella, heavy metals, and the like in conventional bee products. The propolis that I use utilizes third-party testing, so other people testing, not just you saying it's good, third-party testing for 70 plus pesticide residues and also testing for a wide variety of other toxins, including heavy metals, E. Coli and salmonella, things that you do not want

coming along with these remarkable products. I get my propolis from Beekeepers Naturals. Go to beekeepersnaturals.com/model, you're going to get 25% off the remarkable propolis spray. It's called B Immune Propolis spray. That's beekeepersnaturals.com/model. It's B-E-E-K-E-E-P-E-R-Snaturals.com/model, getting this 25% off something that I keep in my superfood cabinet, gives me a couple of sprays in at least every couple of days. I absolutely love it, and I also give this to my kids as well.

My youngest son, Braden, at least getting him some sprays in every week. Just again, stacking conditions, very simple things, proven a bunch of really sound evidence and these simple things that we can use to stacking conditions. So truly grateful for them, beekeepersnaturals.com/model. Now let's get to the Apple Podcast review of the week.

ITUNES REVIEW: Another five-star review titled "Sharing The Truth No One Is Talking About" by Chad. "I've been listening to the Model Health Show for nearly five years. Shawn is not afraid to have insightful content, and incredible guests that are not politically correct, and he does it not for clicks, but to share the truth to the common person. I'm deeply grateful for his work, especially as the world is so overloaded with misinformation. His work has impacted me both personally, impacting the way I eat and exercise, and professionally, he inspired my master's thesis topic, and I have started a leadership coaching podcast in business. Listening to this podcast has helped shape my life."

SHAWN STEVENSON: Let's go. That is amazing. Every single ounce of that. Absolutely amazing, so grateful to be a part of your life and your story. Thank you so much for leaving that review over on Apple Podcast. And on that note, let's get to our special guest and topic of the day. Our guest today is Dr. John Abramson, and he's been on the faculty of Harvard Medical School for 25 years, where he teaches healthcare policy. He also served as a family physician for 22 years, during which he was named a Top Doc six times in local, state, and national surveys. He has served as an expert in Pharmaceutical Litigation and as an unpaid consultant to the FBI and the Department of Justice, including a case that resulted in the largest criminal fine in US history. In addition to many published articles and op-eds, he's been featured in the New York Times, on the Today Show, NBC Nightly News, The Dr. Oz Show, and many other major media outlets. And now, let's jump into this conversation with the incredible Dr. John Abramson. Dr. John Abramson, welcome to The Model Health Show, it's good to see you again.

DR. JOHN ABRAMSON: Shawn, thank you for having me.

SHAWN STEVENSON: Hey, it's totally my pleasure. You already know how I feel about you. I think that your work and your book is one of the most insightful treatises on our current

landscape of healthcare in America. And I literally, and I've told you this, but there's rarely been a paragraph in your book that I do not have highlighted. I could have just taken your book and dipped it into a highlighter fluid.

Just insight after insight. And the first thing I want to ask you about, John, is what inspired you to write this book in the first place?

DR. JOHN ABRAMSON: Yeah. So, I was a family doc, I was trained as a family doc, and I finished my residency out in Cleveland at Case Western Reserve. And did a Robert Wood Johnson Fellowship for two years, studied research design, epidemiology, and statistics, and was headed towards an academic career in family medicine. But inside the university hospitals, family docs are... It's a hard row to hoe. Family docs are kind of low men on the totem pole. And I decided that what I really wanted to do was go out in the community and be a doc and be a family practitioner and take care of all aged people and whole families and make house calls sometimes and go to the hospital and do the thing.

And I did that, I hung out my shingle in 1982, and it was a wonderful practice. And I thought I would never do anything different. And then as the '90s progressed, it became clear that the medical journals were being increasingly influenced by the drug companies. You could see that the big articles were being sponsored by the manufacturers of the drugs themselves, and that the results tended to lean in a positive direction. And then a drug called Vioxx came out in 1999, an arthritis drug that was supposed to be a break-through anti-inflammatory and pain drug, because it caused less gastrointestinal upset. It wasn't any better, it didn't prevent pain any better, but it was supposed to be safer. And an article was published in the New England Journal that made that claim, that though there were numerically some more heart attacks in the people who took Vioxx than the people who took an older anti-inflammatory drug, Naproxen. It wasn't statistically significant and ought not to be a problem, and there were fewer serious GI problems, and therefore Vioxx was a good drug, and you should take it.

And it didn't seem right. And Vioxx was the most heavily advertised drug on TV, and my patients were coming in and asking me for it. And then about nine months later, there was a review article in the New England journal about Vioxx and its cousin Celebrex. And the review article made a statement that there were more cardiovascular problems with Vioxx in that

study, meaning heart attacks, blood clots and strokes, but there were only 70 events, 70 cardiovascular events, so that the increased risk may have been due to the play of chance.

And I knew two things that just stood my hair on end. One is that everyone who's taken the first statistics course in college knows that the statistical significance is dependent on the number of events that happen and the difference between the two groups, so blowing off a statistically significant finding because there were only 70 events, it makes no sense. It's just not logical. And I also knew that there were only 53 serious GI events, so they were blowing off these cardiovascular events, but they were saying that you should buy 2 billion dollars' worth of Vioxx, Americans, because there are 53 fewer GI events.

And at that point, I knew that something was desperately wrong with the way information was being created by the drug companies and published in the journals, and then distributed in the format that doctors are trained to trust, to accept at face value. And that's when I decided I was going to figure out what was happening. Decided to leave practice and write my first book called *Overdosed America*, which was published in 2004. And as luck would have it. Just a week after that book was published, Vioxx was pulled from the market. It wasn't my doing, but another study came out and it showed the same thing, and Merck knew it had to pull that drug from the market. So, I got a lot of TV coverage because I was the last guy who wrote the book, and lawyers saw me on TV, and they started to call me and asked me if I'd be an expert in litigation in the national litigation cases against the drug companies. So, in that role, I got to see all the data, 20 million documents per case, the raw data, what the marketing people wanted to claim the data said, how they put it together into journal articles, and how they marketed those journal articles and how they got to doctors and how they advertised on TV. I got to see the whole story, put it together and write a report, testify about it.

And I did that for about 10 years, spent about 10 years inside corporate computers. I know what's going on in there, and it's a very rare opportunity. It's a very privileged position to get inside those computers and really understand it. So, after I'd been doing that for about 10 years and could see that there was a limit to how far... Trying to change the system from that perspective, from that point of view, there were limits to how far that was going to get, and decided that I would write a book, and that's the origin of *Sickening*.

SHAWN STEVENSON: Yeah, and so your story, as I mentioned, is really remarkable, you are almost like a unicorn in the scenario of being involved in litigation, being able to see behind the scenes, and you've got NDAs out there where you can't talk about certain things that you've uncovered and discovered through your research in looking at what pharmaceutical companies are actually doing behind the scenes. And we're going to start with this mandatory prerequisite of stating, of course, that our pharmaceutical drugs definitely have their place. It's just right now, we've also and... Another great reason I'm really grateful to be able to talk to you today is to look at the results and look where we are as a society right now, and is our approach to health care, is it actually working out? Drugs can be lifesaving in many scenarios, but we've got to understand that we have a farming of sick people happening right now in the United States, that's a totally different stratosphere than most other developed countries.

Really, we're number one as far as our healthcare spending. In the United States, we've got somewhere around 4 trillion dollar health care system, and there was a report that came out last year that uncovered that essentially a trillion dollars is effectively wasted in our healthcare system, and this isn't even to mention the drug over-pricing that we're going to talk about with you as well, but due to issues with administrative complexity, fraud and the like, there's so much money that we have potentially that can be put into prevention and support for real sustainable methods.

But what I want to ask you about, and I haven't shared this with you as well in our conversations, but one of those in the same universe as Vioxx was Celebrex, and Celebrex was my first foray into prescription meds long-term. When I was 20 years old, I was diagnosed with a so-called incurable arthritic condition of my spine. And so, this was degenerative disc disease, and immediately I got my prescription for Celebrex. And I also had some little dabbles of some other... Some NSAIDs and the like, some other stuff. And what resulted from that was there was not a notable reduction in pain, but I ended up developing what now has the label of restless leg syndrome, which I didn't know was related to the Celebrex...

DR. JOHN ABRAMSON: What's the name of the syndrome, Shawn?

SHAWN STEVENSON: Restless leg Syndrome, so I really struggled to sleep at night, which then made it worse for me the next day, just getting up and getting to class, I was in college at the

time, and it just started to really feed on itself, and I just kept taking the medication. Now, I'm adding another medication on top of that to help me to sleep at night. And at no point was I getting any kind of advice on what I can do proactively just to feel a little bit better.

And this is the case for many folks, but there's a reason it's set up this way, and also the good news is we also have a lot of possibility and empowerment in this scenario, but I think a really good articulation, if you could to kind of detail with Vioxx, for example, what actually happened. So, you mentioned in the clinical trial that they were talking about, a tiny incidence of 70 folks having some cardiovascular issues, but what actually unfolded, and can you talk about this really tragic happening that took place with a really an epidemic of heart attacks for American citizens.

DR. JOHN ABRAMSON: Yes, sure. Just before I get there, Celebrex, the key study on Celebrex showed that Celebrex was no more gentle on the stomach, that it was... The study itself claimed that Celebrex was superior based on six months of data, and they published that six month of data in the Journal of the American Medical Association, and that's why doctors thought it was a better drug. It turned out that it was a 12-month study, and the FDA knew it was a 12-month study. And the 12-month study said that it was no gentler on the stomach than the other anti-inflammatory drugs. And some of the manufacturer's own studies had shown that it wasn't even as effective as 400... Two Advil tablets, two over-the-counter Advil tablets, that Celebrex was no better. So, it's the same kind of story. The reason why Vioxx caused so much trouble is that it's a more COX-2 selective drug than Celebrex is. So, the manufacturer was equally malfeasant in the misrepresentation of the benefits of its drugs, they were just luckier that they didn't have this dangerous a drug. And in Vioxx, what happened was this article was published in the New England Journal, and it claimed that there was not an increased cardiovascular risk associated with Vioxx, but it turned out that there were about 2.4 times as many heart attacks, strokes, and serious blood clots in the people who took Vioxx than in the people who took an anti-inflammatory drug, Naproxen or Aleve.

But these data were not published in the New England Journal, and the reason why this happened, why the incomplete data hiding this more than doubling the risk of cardiovascular disease happened is because when data are submitted in a clinical study... Reporting on a clinical trial, when data is submitted to the journal, only the summary data in the manuscript

are submitted, and the peer reviewers don't get to see the real data from the trial, and the medical journal editors don't get to see the real data from the trial. So, this study that had been published by... It was really sponsored by Merck. There were three Merck employees who were authors and eight non-Merck employees who were authors. The three Merck employees got to see the data, the eight non-Merck employees did not get to see the data, and this incomplete data was published in... Were published in the New England Journal, convincing doctors... I mean there's no holier, more trustworthy medical journal than the New England Journal. And the doctors were reading this, and they thought it was safe, when in fact, Merck knew it wasn't safe, but the New England Journal and its peer reviewers didn't.

The end result was by the time Merck was finally taken off the market in 2004, between 40 and 60,000 Americans had died from heart attacks, from cardiovascular events associated with Vioxx. 40 to 60000. That's like the range of Americans who died in the Vietnam War. It's an enormous number of people. They died taking Vioxx, a drug that is no more effective at relieving pain than over-the-counter anti-inflammatory drugs, and in fact, one of the last court cases that Vioxx was involved in, that involved Vioxx, I was an expert in. And we asked for that primary patient data that the peer reviewers never got to see. And we found that there wasn't even a GI advantage unless you were also taking Prednisone or another steroid for rheumatoid arthritis. When you take those people out of the study, there wasn't even a reduction in serious GI events, so it offered nothing for the vast majority, for like 97% of the people who took it. It offered no advantage, it cost so many times more than the older anti-inflammatory drugs, and it killed 40 to 60 thousand people.

SHAWN STEVENSON: It's heartbreaking, and you share the story of even a young girl ending up having a heart attack as a result.

DR. JOHN ABRAMSON: Yes, a stroke.

SHAWN STEVENSON: Stroke, yeah.

DR. JOHN ABRAMSON: I got this note, an email from her mother. Her mother wrote me, called, and said, "Would you be kind enough to take a look at my daughter's medical records? I don't know what happened." And it turned out that she died after she had taken eight samples, that

her family Doc had given her eight pills of Vioxx for headaches after she had taken a fall, and she ended up dying of stroke.

SHAWN STEVENSON: That is just crazy, and Vioxx was distributed by Merck.

DR. JOHN ABRAMSON: That's correct.

SHAWN STEVENSON: And I just checked out Merck's financials today, and they are doing well. I mean, multi-multi-billion-dollar company. You would think if something like this took place where 60,000 Americans, upwards of 60,000 Americans are killed, killed by their product, the heads would roll, the fines would be outrageous, people would spend time in jail. What happened?

DR. JOHN ABRAMSON: What happened is heads didn't roll. Nobody went to jail, even though there are emails that show they knew that there was significantly more risk of cardiovascular events with Vioxx right from the get-go. But here's the thing, the guy who's the CEO of Merck right now was the Chief Counsel of Merck as they went through the Vioxx litigation. So, the success, his success, getting Merck through that litigation, nobody went to jail, the drug company wasn't a... It's called disbarred from Medicare for not presenting accurate data. And on they go.

SHAWN STEVENSON: This is heartbreaking, and this is why to take your book even in some chunks because just being able to sit with this information that these things even happen. But for me, what I try to do, even in my day-to-day communications is put myself in someone else's shoes and try to look from someone else's perspective in the scenario. And you losing a loved one who is in pain, and they're trusting in the whole process because it isn't just the physician who's the end exchange point, but all the way up the chain, because as you mentioned, it's the data that the physicians were receiving. And then you, both you and I, we've got tons of friends and colleagues who are physicians who are running practices, and it's a very rigorous experience. There's time constraints, there's the quantity constraints. And being able to actually take the time and look at the data yourself, that's not often even apparent. But on top of that, what we're getting published in one of the most prestigious journals in the world is we're getting data that even the people who are publishing the data aren't actually seeing the

trial data itself, they're basically... Merck was able to grade their own homework and then tell you what happened. Is that accurate?

DR. JOHN ABRAMSON: That's exactly right. And I want to be clear about those docs who are doing their best to get the information, and they're working hard and they're trying to do their best for patients, and the information is coming like a white-water river coming, washing over them. And so, they're going to take the information that they get from the sources that are easiest, but we can't blame those doctors for not doing their homework. The data aren't available. I know almost all of what I know about this because I was in litigation and I had signed non-disclosure agreements, confidentiality agreements.

And there's only a very small percentage of what I learned that I can tell. So, the problem with the docs is not that they're not going deep enough into the data, the problem is that they don't know, they can't get the data that that's invisible to them that they can't get it, is not known. And many of the docs who are listening to this conversation right now, the peer reviewers don't have the data, you can't trust it. When you look at the clinical practice guidelines that are supposedly made by the best experts in the world and the best organizations in the world, those experts who write the clinical practice guidelines don't get the data. They have to trust the drug company's version of the data. The docs aren't able to do their job as so-called learned intermediaries to bring the best of medical science to their patients, the docs aren't able to do that, and they don't know they're not able to do it.

SHAWN STEVENSON: That's so important. And thank you so much for clarifying that because it's another piece here. We're not wanting to get into a blame game, especially of individuals, but there are systemic issues here. And one of them that I want to really reiterate this point with Vioxx in this context, the data really indicating, and for folks who actually get to peek behind the scenes know better as far as their effectiveness. And also, there was this... It was under the guise of, "This is going to pull away some of the gastrointestinal issues you might see from something like ibuprofen, for example," that was the claim to fame for it. But at the end of the day, it's the appearance of innovation. It's the appearance of innovation and what that does is it creates an opportunity to have a product that is significantly higher-priced, and then it becomes a cash cow. It's just a flood of income that comes in for the pharmaceutical company under the guise of innovation. Now, let's talk about this superficial appearance of

innovation in medicine that has led to skyrocketing costs in our healthcare system. The history of insulin is a great illustration of this. Let's talk about that.

DR. JOHN ABRAMSON: Okay, so insulin is a good thing to talk about today because it's just about the 100th anniversary of the first treatment of a person with Type 1 diabetes who was going to die in the hospital, and he was treated with a ground-up extract of dog pancreases. The people who injected him with the dog pancreases didn't understand which of the hormonal structures in the pancreas was active, but the extract brought the boy's sugar levels down and brought his ketone levels down. And he lived... He was 12 years old when he was in the hospital, dying and he lived 'til he was 27, and that was the first successful treatment of a patient with insulin. That was 1922, January of 1922. And then in the following year, three researchers, this happened in Canada, and three Canadian researchers patented insulin, which is the hormone that was extracted from the pancreas of the dogs. They patented that, and they sold their patent to the University of Toronto for \$1 each. \$1 each because they believed that medical research ought not to be for-profit, that it ought to be for public good. So, animal insulin became the standard of care, and the insulin quickly came from...

Was transitioned to cows and pigs because they could get the pancreatic tissue from the slaughterhouses, not have to kill extra animals, extract the insulin and purify it and bottle it, and sell it. And that was, animal insulin was the standard of care until 1982. During the '70s, genetic engineering, the technique of genetic engineering of inserting human DNA, pieces of human DNA code into other organisms like E. Coli bacteria or yeast or hamster ovary cells, a number of different targets, but as the scientists learned how to do this genetic engineering, insulin was the first drug that became the candidate to sell a genetically engineered drug to the public.

And in 1982, the first genetically engineered recombinant human insulin was put on the market. It was a very easy sell. There's a picture of a little four-year-old boy with his teddy bear next to him on the couch, and Lilly is advertising and saying, "Are you going to have this four-year-old boy already getting treated for medicines from the past?" And making the claim that the genetically engineered insulin are identical to human insulin, and they're pure, and they don't have animal bad juju on them, and they're not immunogenic. And very rapidly doctors adopted the recombinant human insulin, and the animal insulins went... The use of the animal insulins

went down quickly and eventually faded away. Problem is that just as you were saying, Shawn, this was a radical innovation, like a science fiction innovation. But there wasn't evidence that the treatment was superior, and the docs didn't wait to see whether the evidence showed it was superior. It appeared to be superior on the face of it, and the manufacturers were able to create the illusion of superiority, so the recombinant human insulin rapidly replaced the animal insulin.

SHAWN STEVENSON: And at a much higher price point already as well.

DR. JOHN ABRAMSON: At a higher price point, but not orders of magnitude higher. A vial of animal insulin cost the equivalent now of about \$7.40, and the human recombinant insulin was about \$21. So, it was more, but not a huge amount.

SHAWN STEVENSON: Three times as much.

DR. JOHN ABRAMSON: Three times that's good.

SHAWN STEVENSON: But not as much as it's about to get for this next part.

DR. JOHN ABRAMSON: Yeah, exactly, you can make your shareholders happy, but you can make them a lot happier with what happened next. Because human recombinant insulin was going along, and then the insulin manufacturers decided that they would tinker with the amino acid composition of the insulin molecule and make an insulin that was actually better than the human insulin they were making called insulin analogs.

The first of the insulin analogs came out in 1996. And the claim was that with insulin analogs, you could recreate normal physiological glucose metabolism better than with the human recombinant insulin. Now, the insulin analogs quickly replaced the recombinant human insulin, and then what happened is what you were saying, then the price started to go up in the 2000s through I think I peaked at 2019. The price of a vial of insulin analogs peaked at about \$330, so that... \$330 so that the average cost of insulin was \$5200 a year. Something that most people don't know is that people with Type 1 diabetes don't make any insulin. And they need insulin or they're going to die, and most of them would die in short order. But because there are so many more people with Type 2 diabetes, and a quarter of the people with Type 2 diabetes end up

needing insulin, about 80% of the insulin that's used in the United States is used by people with Type 2 diabetes. So, we're spending about somewhere around \$20, \$23 billion a year now on insulin analogs for people with Type 2 diabetes, and the problem is we're spending \$5200 a year instead of about \$470 a year on the recombinant human insulin.

And the problem is that there's not evidence of superiority with the insulin analogs. It's been a manufactured appearance of superiority created by the insulin makers and the public relations people to create the aura of superiority, to work with non-profit organizations that set standards, doctor standards for diabetes therapy that call for the use of the insulin analogs when that wasn't the case. They were operating on misrepresentations about the benefits of the insulin analogs. So right now, we have an epidemic of Type 2 diabetes in the United States, and we're spending an extra \$20 or \$23 billion a year on insulin analogs. And if we brought 90% of those people back to human recombinant insulin and reclaimed that money, we could enroll almost all of those patients in programs at the local YMCA that would prevent diabetes in people who are at high risk of developing Type 2 diabetes, and that could help to decrease the need for medication even in current Type 2 diabetics.

So, it's an example, you mentioned it earlier, Shawn, we're treating the downstream problem of Type 2 diabetes with medicine that costs about 11 times more than it needs to, instead of going upstream and providing preventive care so people can stay healthy and not develop Type 2 diabetes. But the money is downstream. And unfortunately, the knowledge that good docs have, the belief about how they should take care of their patients is so controlled by the manufacturers, that practicing doctors trying to do the best for their patients are prescribing this unnecessarily expensive insulin analog therapy. And we're not focusing as a country on why 40% of Americans are obese, soon to be 50%, way, way more than any other wealthy country. We're not focusing on that.

SHAWN STEVENSON: Yeah, this is really shocking in and of itself. Again, we have the appearance that the cost is buffered because of insurance, for example, but all of this is getting assimilated into our healthcare system that now the expense is just, again... We'll get more into this a little bit later, but the amount of money that we spend on healthcare in the United States is so much higher than other industrialized countries.

DR. JOHN ABRAMSON: Yeah. Let me interrupt for one sec 'cause I want to stay with the idea of what people are actually paying out of pocket for their insulin. So, the way that the legislation, which may not even pass, is designed right now is that the co-pay for insulin will be limited to \$35 a month so that people can afford to get their insulin. But that's a way to continue the cover-up that we're wasting all this money on expensive insulin when we could be spending on 11th as much on recombinant human insulin. So, it's good for the consumers, for the people with diabetes that their co-pay would be limited to \$35, but we're just simply transferring the extra cost of the money back to the government. And we're socializing the amount of money we're wasting on these expensive insulins and giving the money to the manufacturers.

SHAWN STEVENSON: We're all paying for it. At the end of the day.

DR. JOHN ABRAMSON: We're all paying for it, that's my point.

SHAWN STEVENSON: And it's hurting us. And so, this leads to what happens when we don't have that insurance. And you shared a story, I believe it was Alec Raeshawn Smith.

DR. JOHN ABRAMSON: Exactly.

SHAWN STEVENSON: His history of this directly impacting... This is one of the most important things because again, we hear these statistics, we hear about these entities, but what it boils down to is humans and the lives that it's impacting. So, can you share his story?

DR. JOHN ABRAMSON: So, Alex was, became a Type 1 diabetic. He developed Type 1 diabetes when he was 24 years old, and he was on his mother's insurance. She lives in Minnesota, she works for the State of Minnesota, and she had good insurance. So, he could afford his insulin expenses. Alex worked hard, he was the manager of a family-owned small chain of restaurants, and he was doing very well on his insulin. He checked his blood sugars, and he monitored his insulin, and modified his doses, and he was doing just fine until he turned 26 when he went off his mother's insurance, and he couldn't afford his own insurance.

He was making about \$35,000 a year as a restaurant manager, but he couldn't afford his own insurance. So, he went to the pharmacist and asked the pharmacist to fill his insulin

prescription, and the prescription for the supplies for his diabetes as well, and it was going to be \$1300 a month. And he just couldn't afford it. There was no way he could afford it. So, he carried this burden himself and decided that the best way, his doctor had said he should continue with the same insulin, and he carried this burden and he coped with it by decreasing his dose of insulin, so that he could save money and try to get by with less insulin. In three weeks, he was dead. Dead. And the guidelines that the doctors were following called for Type 1 diabetics to be using these insulin analogs, and it was only after Alec died that the guidelines changed and said, "If there are economic problems people can use the less expensive insulin if they need to." And essentially saying you can spend \$5200 a year on insulin or \$470 on insulin.

Without saying, "Why doesn't everybody try the \$470 insulin," but that's another subject. But Alec didn't know, and his doctor didn't tell him that he could have gone down to the less expensive insulin, especially while he didn't have insurance, and it would not have been an economic hardship for him. And he died. He died at age 26 and three weeks.

SHAWN STEVENSON: These scenarios should not happen, especially in the United States of America. And here's the thing as well, because even though you share these unique stories, you also keep pointing to the fact that his situation is not uncommon. There's actually a significant portion of folks who use insulin who run into these cost issues who individually ratchet back on the amount they're taking and putting their lives in danger. This is not uncommon.

DR. JOHN ABRAMSON: That's exactly right. It's exactly right. And Shawn, let's turn the microscope up on this just a bit, 'cause you say, "Well, why are the doctors believing that they should be prescribing the expensive insulin and not even asking their patients if they can afford it?" And the reason is that the recommendations of the professional organizations and the non-profit organizations, like the American Diabetes Association and American Association of Clinical Endocrinologists, were making guidelines that said that the insulin analogs should be the drug of choice, that's the drug you should use for these people, and they did not say...

But if there's economic pressure, go ahead and use the other one. They didn't add that until just recently. And in fact, Alec's mother has done a great job of making her son's death known. And I think it's her political activism that has gotten these guidelines, to tell the truth about

using the less expensive insulin interchangeably, especially under conditions of economic necessity. But the docs didn't know that that's the key. It goes back to what I was saying before about the docs not having the good information. You can't hold a doctor responsible when the American Diabetes Association is saying just use the insulin analogs. He's following this, he, or she, is following the standards of care, and they're trying to do the right thing, they're trusting the organizations, and the organizations have these financial relationships with the manufacturers and it's...

It's hidden and it turns into this whole surround sound nexus of information wherever the docs look. Whether they look to the American Diabetes Association standards of care or whether it's the drug rep who's coming in the door and tells them that you can get a bit more physiological response from insulin analogs or the review articles that are being written in their journals. Wherever they look, they're seeing this. And what we lack in the United States is an independent oversight function of the value, the medical value of new drugs. We do not have what's called a health technology assessment, so the docs have nowhere to turn to for an independent assessment of which drugs are going to be superior for their patients.

SHAWN STEVENSON: Your work is a call to arms for something like that to manifest because we need it because you mentioned the... Of course, there's the cost issue here that is not being broadcast in these associations like, "Hey, this can save somebody's life, there's not going to be a big difference here if they ratchet back and they do the, what is less innovative on the surface... "

DR. JOHN ABRAMSON: Exactly.

SHAWN STEVENSON: And so, what we're looking at here, and what is... This is the most important point for me personally, is also in their recommendations with these very prestigious organizations, these public studies, is they're not demonstrating significant improvement with these innovations, yet it's jumping the price up to these astronomical levels and then creating this whole marketing picture that this is the best stuff, this is what all your patients need, that other stuff is obsolete and it's simply not the case. And you see throughout, and I love it how you articulate this stuff, and you literally just point throughout, "Okay, this person had financial ties to pharmaceutical companies, this person had financial ties to the

pharmaceutical companies." It's not to say that they're purposefully doing this, but it also brings up they're probably not going to talk bad against it, that's the most important...

DR. JOHN ABRAMSON: That's exactly right.

SHAWN STEVENSON: So, this is a really fascinating instance here, but you noted also that approximately one out of four new drugs, I'm throwing up the quotes, approximately one out of four new drugs are not statistically significant improvements of previous and typically far less expensive drugs that they would be replacing.

DR. JOHN ABRAMSON: That's exactly right. And it's not just that one out of four aren't superior to previously available therapy. That, if we step back, we might think that that makes sense. The problem is that what docs know about those medicines, and let me put air quotes around know, what they think they know about those medicines comes from them and we don't have an independent way of evaluating the superiority of those drugs. So, the docs can't know which of the four drugs is actually superior and which three out of four aren't actually superior. American doctors don't have a way of knowing that. In other developed countries where they have health technology assessment, the docs are advised to use the older, less expensive recombinant human insulin first, not insulin analogs, but recombinant human insulin first for Type 2 diabetics. And if people fail and people have idiosyncratic reactions to drugs, and it's good to have choices, different arrows in your quiver as a doctor, if people fail, they may need the more expensive drugs, but not many people will fail. But we don't have the mechanism for informing American doctors how best to use those new drugs, that's left to the drug companies. And their marketing efforts create the appearance of knowledge that drives their use of expensive drugs.

SHAWN STEVENSON: It's actually brilliant how this system is constructed, and it's been working really well for the entities that are profiting from it. And so, a question might come up, how are these drugs even getting approved in the first place? We're supposed to have a gold standard Food and Drug Administration here in the United States. And we talked about this, but the EJS Center for Ethics at Harvard published a report and they found that somewhere in the ballpark of about 200,000 Americans die each year from pharmaceutical drugs. And about 130,000 of these folks are dying from properly prescribed medication, the 80 to 130,000. And

it's just like, of course, there's going to be... We can put the label of collateral damage here, that's what that is. But the reality is very different because when we look at, again, Vioxx had some clear issues, but it still got approved, but now we're looking at the system itself that is allowing this funnel to take place. Well, a big part of that is this gatekeeper, which is the FDA. And one of the things that I shared recently; I really did a masterclass breaking down... Which again, it's good to have an FDA. It's actually had many benefits over the years. However, if we look at how things are set up now with user fees, and we're seeing that the entity that's supposed to be policing pharmaceutical companies is now largely funded by... Their scientific review budget, we're talking 60 plus percent of their scientific review budget...

DR. JOHN ABRAMSON: 61%

SHAWN STEVENSON: Which is billions of dollars, is coming from pharmaceutical companies that they're supposed to be policing. And their overall budget, it's knocking on the door of half of their budget itself, it's not coming from us, it's coming from pharmaceutical companies and it's all under the guise... And I always look at, how did this happen? It's under the guise of something positive. We can get drugs faster out to people who need them if we can bring these user fees in how pharmaceutical companies pay for their privilege, but what that does is it starts really muddy the waters of ethics, because one of the other things, this was published in the journal Science, they did a review of people on the Physician Review Board at the FDA to look at any financial ties they had to pharmaceuticals. And what they found was it wasn't a blatant pre-thing where approve my drug and we're going to give you this check. They did an analysis of post-hoc payments, so after the drug has come up for the approval process, it might be three months later, six months later, a year later, almost 40% of physicians on the Physician Review Board received payments from pharmaceutical companies. And many of which we've seen this revolving door of folks leaving the FDA and getting these really high-paying jobs at pharmaceutical companies so. So again... And the thing is, even though that it sounds like, wow, this is really questionable, it's perfectly legal the way that things are set up right now.

DR. JOHN ABRAMSON: Absolutely, absolutely. Two comments. One is that the FDA's job is to approve drugs that are "safe and effective". They have to be more effective than placebo in at least some of the trials they've done. All the trials don't have to show they're effective. They

can pick which trials they're going to call pivotal trials, and the safety is looking at adverse events. But the FDA's job is to approve new drugs and let doctors know that they can now prescribe them. But the FDA's job is not to help doctors to understand which drugs are the best drugs to prescribe. So, they determine which drugs physicians can prescribe, but they don't determine which drugs physicians should prescribe, and that is in other countries is left up to these health technology assessment agencies. And we don't have that.

We let the drug companies make up their own stories or produce their own stories about which drugs doctors should be using. The other thing I wanted to say about the advisory committees, who are going to have financial relationships with the drug companies, so the drug Aduhelm, is that on your radar screen? The Alzheimer's drug that got approved even though it wasn't shown to be effective, and it was shown to cause brain swelling and bleeding in an excess of about 33% of the patients who took it. And the advisory committee voted 10... 10 voted not to approve the drug and one person voted to abstain, so 10 to nothing, and the FDA decided to approve it anyway. And that's where we are right now in this stand-off. And the person who is in charge of the division of the FDA that approves new drugs said that they could have avoided the "emotionalism" at the advisory committee that voted 10 to one abstention not to approve the drug, they could have avoided that emotionalism if they allowed more people with financial ties to drug companies to participate in the advisory committee. They could have avoided the emotionalism, and that's in print.

SHAWN STEVENSON: Oh, my God. There are so many things that I see of myself in you, even that statement, it's in print. We have the paper trail. Here's the receipt. I can't make this stuff up because so much of what we covered sounds so just illogical that these things are even happening or possible, and yet they are, it's the reality we're existing in.

We've got a quick break coming up, we'll be right back.

One of the biggest issues facing our world today is the health of our immune system. Now our immune system has many different dynamic parts. We have an innate immune system, and we also have an adaptive immune system. Our adaptive immune system has an intelligence that helps us to adapt to any pathogen that we are faced with. And our nutrition is a big part of this equation because our immune cells are made from the foods and nutrients that we consume.

And one of the most powerful nutritive sources proven to help fortify our immune system is highlighted in this the study published in Mediators of Inflammation. They discovered that the polysaccharides in reishi medicinal mushroom were found to enhance the proliferation of T-cells and B cells of our adaptive immune system.

These were found to have the capacity to be immunomodulators, helping to up-level the function and intelligence of our immune system. Or if our immune system is overactive to help to reduce and bring down that immune activity. Again, this is called immuno-modulation. And also, inflammation of many different viruses that we might be exposed to is one of the big issues. And one of the viruses that we're facing right now has a tropism or target towards inflammation of our lungs. And another study published in Patents on Inflammation and Drug Discovery revealed that the renowned medicinal mushroom, reishi, has potent anti-inflammatory and anti-allergic action. Plus, again, it possesses immuno-modulating capabilities. Super remarkable. It's one of the things that's been utilized for centuries that we have access to today, but we want to make sure that it is dual extracted, meaning that it's a hot water extract and alcohol extract, so we're getting all of these benefits that are noted in studies like these. And the place that I get my reishi from that does it the right way, organic, high-quality reishi without any nefarious substances coming along from these random companies that are putting these formulas together is from Four Sigmatic. Go to foursigmatic.com/model.

That's F-O-U-R-S-I-G M-A-T-I-C.com/model, and you're going to get 10 to 15% off all of the medicinal mushrooms that they carry. And by the way, reishi is great for your sleep as well. This is another peer-reviewed study published in Pharmacology, Biochemistry and Behavior, found that the renowned medicinal mushroom reishi was able to significantly decrease latency. Meaning you fall asleep faster and increase your overall sleep time and also increase your sleep efficiency. So much good stuff. And this is one of the things about real foods that have a storied history, is that they're not just good for one thing, they're good for many things. Alright, that's why I'm a big fan of reishi. And I have a cup many nights of the week before bed, about 30-45 minutes before bed, definitely helps with improving sleep quality, but also beneficial for our immune system. Maybe have it with a little bit of whole natural source high-

quality fats, like MCT oil, coconut oil, maybe a little bit of ghee, whatever it is that you're into. It helps to cut the bitterness. Maybe a little bit, couple of little drops of some stevia, some English toffee stevia, chocolate stevia, just to make it nice and palatable. Or some folks have their reishi tea all by itself. Either way, it's one of the most effective things right now when immune health is a top priority. Check it out, Foursigmatic.com/model, and now back to the show.

So, I want to ask you about this. I want to go back to this diabetes issue because insulin is obviously a necessity in our society, but what folks need to understand, the primary piece of this equation is the fact that diabetes rates have tripled just in this last decade-ish to two decades versus the previous. And you talk about this in the book, previous decades it went up a little bit, but just since then since the 80s our epidemic... It truly is a multi-pronged epidemic of diabetes where we're knocking on the door right now of nearly 130 million Americans having diabetes or pre-diabetes right now. And this is a significant portion of our population. This is not okay because if we're even talking about pre-diabetes, we're leaning into higher risk of cardiovascular disease, high risk of stroke, higher risk of Alzheimer's. The list goes on and on, and this was something that didn't remotely exist in this context in our society. And I want to mention this because having the ingenious idea, which I know that our ancestors previously have done this, I know for a fact when they were looking at this issue with this kid's pancreas, if the beta cells are not producing insulin, for example. And they're like, "You know what, let's give them the pancreas of something else."

And it worked. The same thing, like this, is still happening for thyroid medication, for example, animal source. So, this has been seen repeatedly throughout history and throughout different functions of the human body, being able to like, this thing is not working correctly, let's get this thing from something else, that mirror image of that thing. And so, we go from that, and we take that jump, but this is the point that I want to mention, the individuals who discovered this and got the patent going and selling this incredible innovation, it's saved millions of lives. A dollar, a dollar each for these three individuals. Whereas today it's like, I need that seven-figure check for this or eight-figure check or whatever.

DR. JOHN ABRAMSON: I was going to say, don't settle for seven figures. It could be nine figures.

SHAWN STEVENSON: Right, and there was this sense of altruism that was... It wasn't just these guys. It was just kind of, as you alluded to, a gentleman's approach to things. Like science is for the greater good and not just for my personal profit, but that is literally the opposite scenario. And this leads to the question that I have for you, we know what the issue is here with Type 2 diabetes, which is 95, approximately 95% of the cases of diabetes or Type 2 diabetes, which is... The name had to be changed because it was adult-onset diabetes, now the name is changed. And because children have it now, it's not just adults.

DR. JOHN ABRAMSON: That happened during my career, I couldn't believe that they were saying that adult-onset diabetes doesn't describe the disease anymore. It was just so shocking that children were getting it.

SHAWN STEVENSON: And then what it is, and both of you and I, when we step back and look like actually it's not so shocking, look at our lifestyle, because this didn't happen out of nowhere. This is the key. When you see an epic jump in a certain lifestyle-related condition that has to do a lot with our blood sugar and our diet and things that influence our blood sugar, we know that something is severely off with our lifestyle. And so, the question I want to ask you about, and I'm... This is one of my favorite parts of the book. You ask the question that I'm always asking: What if we put up a drug against a lifestyle intervention and see what happens. And this is what happened with diabetes, and there was a study group using Metformin, there was a study group that was a placebo, and there was a study group that was giving consistent lifestyle coaching and interventions. Let's talk about what happened.

DR. JOHN ABRAMSON: Yup, so that's the diabetes prevention study funded by the NIH, National Institutes of Health, not by the drug companies. And it's a very well-designed study 'cause it wasn't just a drug against placebo to see if we can prevent diabetes, it was a drug against placebo, against lifestyle, to see what the best way to prevent diabetes is. Not what the best drug to prevent diabetes is, but the best way to prevent diabetes. And the clear winner was lifestyle intervention, and that is a stunning result, not just because it shows that lifestyle is superior to medication, which is superior to nothing in terms of preventing pre-diabetics from going on to get diabetes. But the really revolutionary finding in that study that has not sunk

into doctor's consciousness is that you can get people to make lifestyle changes. This is a randomized controlled trial. They didn't cherry-pick, they didn't take people who are willing to exercise. These are randomly assigned people; people are randomly assigned to the groups. And the people who were randomly assigned to the Intensive lifestyle counseling lost about 10 pounds and kept it off and were exercising about five times a week and continued to.

So, you can do this. And the epidemic of diabetes, which you describe exactly correctly, Shawn, is clearly an epidemic, a consequence of the epidemic of obesity in American society. 40% of American adults are obese now, it's going to be 50% within about 10 years. And this is just purely a consequence of our lifestyle, of what we're eating and how much exercise we're getting. Somewhat modified by socio-economic circumstances, 'cause people who are less wealthy have less opportunity to make the voluntary choices to get out of this lifestyle. So we don't want to be discriminatory here, some people really can't avoid it, but most of us can. And what we're doing, the problem is, and this is the whole problem with our approach to health care, this is it in a nutshell, the problem is that the drug companies can make money with the downstream treatment of people who get diabetes, but they can't make any money, there's no big companies with major swaths of shareholders that are going to make money by Americans going to eating healthy diets and getting proper exercise and otherwise living healthy lifestyles. Nobody's going to make big money doing that.

And the real underlying problem of what we're talking about is the way the financial consequences drive the epistemology. What we believe to be true about these diseases is driven by the financial consequences, not by the medical and health and well-being consequences.

SHAWN STEVENSON: This is so powerful and so true. And I can speak from that position, of course, of coming from an environment where the economics have already put me in a disadvantage. Again, I had an advanced arthritic condition of my spine when I was a kid. Not to mention autoimmune-related inflammatory issues of the lungs, like asthma and allergies, and the same thing with my siblings and everybody in my family had something. And first and foremost, we tend to push this to the side of genetics. And we know today the field of epigenetics has really blown that kind of cookie-cutter thinking out of the water. And you also share this as well, that somewhere in the ballpark of 80% of our health is within our own

possibility, in our own control, there are genetic predispositions for things, of course, but if we're not coming here with a true genetic defect, which is we're talking less than 5% of folks have true genetic defects that they're born with, something happened to turn on essentially these programs that manifest disease, which even a disease itself is your body still trying to figure out how to keep you alive.

Let me figure out how to help this person. So just to share this directly from your book, so we had a placebo group, we had one group that was given Metformin, and then we had the lifestyle intervention group. And the group who received the Metformin had a 39% improvement in their results in reducing the risk of developing diabetes, which is notable, 39%. But the folks who received the lifestyle intervention and coaching had a 58% reduction in their risk, almost 60%.

It's unbelievable. And this is a story, unfortunately, that we tell ourselves or that we allow ourselves to tell. I know, again, many really prestigious and passionate physicians, and even during this time that we're experiencing right now with COVID-19, and we know that obesity being a primary risk factor. The CDC's report back on July 1st of 2021, they looked at over 540,000 COVID-19 patients from over 800 US hospitals, and they found that obesity was the number one risk factor for death. Number one, that's a huge data set to analyze, and so...

DR. JOHN ABRAMSON: And I think diabetes was number two.

SHAWN STEVENSON: Anxiety and fear-related disorders was number two. Diabetes was number three.

DR. JOHN ABRAMSON: This was up there.

SHAWN STEVENSON: Diabetes was number three. And so that second one though, that leads that opens a door to a whole other freaky area that if we can we would circle back to. But here's the point, with this being the case, you would think that this would be headline news all over the place, like, "We've got to get our citizens healthier. This is our number one risk factor." But then it points to... And I've had many friends come up and say, "You know what, Shawn, you're

absolutely right, but we can't get people healthier overnight." Here we are two years later. Now, here's the thing that I want to communicate. This was never in the plan in the first place, this isn't something that we were doing in the first place. I saw it as a massive leverage point to use this as an opportunity. Fear is a great motivator to do basic things and leveraging human psychology, and instead what we have is folks coming up again, well-intentioned, highly educated saying, "You know what, I've been trying to tell people to lose weight for years, Shawn, they just don't listen." And that's the problem because I've never met one person in my clinical practice or in my life, I've impacted lives, now I'm grateful to say millions of people, but just thousands in my clinical practice and then teaching events, all that kind of stuff, never met a single person who didn't want to be healthy.

They might have social-economic reasons, they might have stories that they painted on why they can't and many of them are justified, but we create this state of learned helplessness, everybody wants to be healthy. It's about creating the conditions and us being teachers in those scenarios. We have a system that doesn't really allow for that. And you mentioned this study was not funded by pharmaceutical companies. It opens the door to better data right off the bat, and what we have is being able to take the time with people to find out what is their challenge in getting from where they are to where they want to be, letting them have time to talk and to share their stressors, to share this is what I struggle with my diet. Getting time to actually get educated. Not just like, you know what, you need to lose weight, you need to count your calories or cut your fat, these very superficial almost BS things that tend to not work for the majority of people because they're not backing it up by sound consistent peer-reviewed data and also leveraging human psychology. So, I'm getting a little bit on the soapbox here, but for me, it's a big excuse because this is a randomized controlled trial showing when people are given the opportunity to be supported and coached on getting healthier, it works.

DR. JOHN ABRAMSON: It works, it works. And to go back to our previous conversation about insulin, if we switched 90% of people with Type 2 diabetes who are currently taking insulin analogs to recombinant human insulin, we would save enough money to enter almost all those people with pre-diabetes into exactly the program you're talking about, Shawn. It's economically neutral. There's no reason why Democrats should feel better about that than Republicans. It's economically neutral. It builds health, it builds well-being, it builds a sense of agency and competence in the world. And we're not doing it because the "knowledge" that

doctors are following just points to downstream therapies, expensive downstream therapies. And we can't go on like this. At some point, we've got to stop this, and better sooner than later.

SHAWN STEVENSON: That's absolutely right. And again, the ultimate takeaway that I want folks to take because there's a lot of healthcare practitioners who listen to this show, is that we want to stop with the excuse-making and get better at our jobs of educating and supporting folks. Because it is absolutely possible, and also, it's probable once we get the right information in people's hands, give them basic support. And the resources, as you mentioned, they exist. It's just. What are we doing with it? And so, one other little interesting point and this really came out for me as I was reading like never before, it really, really struck me, and I don't know if a lot of people ever even think about this, a lot of scientists ever think about this, and this is a game-changer.

If we're looking at the effectiveness of a drug, we're usually looking at the effectiveness of a drug versus nothing, the gold standard of study in randomized placebo-controlled trials is having the drug go up against nothing. It's not going up against another drug, it's not going up against a lifestyle intervention, it's not going up against a well-documented proven supplement, it's going up against nothing. And so is nothing better than something or is something better than nothing, that's really the argument that's taking place in our science. And our health care system is built upon that premise, and it's not right. When we have, again, mountains of peer-reviewed evidence on the efficacy of basic things that our genes expect from us, like movement, like real food, these essential things, not to say that drugs cannot be supportive in these tenets, but if we're not getting the essential stuff, we're window dressing.

DR. JOHN ABRAMSON: That's exactly right, Shawn. So, the real issue here is that the purpose of that research, about 86% of which is sponsored by the drug companies, is to produce data that will sell drugs. They say that there's a slide show of that in my book, that was shown at trial. The purpose of that data is for marketing, it's not to help doctors help their patients reach optimal health. And this is a system, it's a system that's designed to maximize the returns that investors in pharmaceutical companies, biotech companies, that maximize the returns that the investors get. It's not a system that's designed to maximize the health that the consumers get.

SHAWN STEVENSON: We can change it. And to read from your book as well, I kind of tapped on this subject a little bit with the diabetes rates going up, but you mentioned that between 1960 and 1980, the percentage of obese American's adults went up slightly, it did, from 13.4% to 15%. But from 1980 to 2016, the rate of obesity increased from 15% to 40%. And this is... And again, we think that this is where we are now, somewhere in that sphere. You know that it's projected by 2030, it's going to be at almost 50%, but I believe COVID has helped to usher that in a little bit faster, based on the data that we have. The CDC published some data looking at childhood obesity. And moderately obese children, their annual rate of weight gain doubled, it actually doubled in this time span.

DR. JOHN ABRAMSON: Makes perfect sense.

SHAWN STEVENSON: And so again, if you look at all the conditions around the lack of movement, the isolation, the poor mental health, the processed food consumption that just skyrocketed. One of the first things that I did, John, at the beginning of all this was I went in, I started tracking the sales from Kraft Foods and like... I was just looking at what the heck is going on. There was even one popular food manufacturer that was about to declare bankruptcy, and this is in my notes, I don't remember which one it was, but COVID essentially saved their business. And they're making like boxed macaroni and cheese and whatever, ravioli and stuff like that. But again, it's just pulled us further away from what our genes expect of us. And so, what I want to ask you about is another big name in what is taking place in the world right now, and this is a story of Neurontin, that you highlight in your book. And this had to do with Pfizer, and folks know that I've talked about Pfizer had to pay the largest settlement in the history of the Department of Justice. And you were involved in that, you are the guy who has actually involved in this. And so, for me, it was just like, I feel like I attracted this scenario to be able to talk with you, but the crazy thing is you can't really share details about it. They had this really negative thing that they did, but you can't talk about what they actually did.

DR. JOHN ABRAMSON: Right? So, they had a drug... It was a cousin of Vioxx called Bextra. And when I'm an expert in litigation, it's civil litigation, so plaintiff's attorneys are suing drug companies on the behalf of insurers or unions or government entities that paid for the drug. It's not a criminal trial, but I learn a lot of stuff, and I became a real expert in Bextra when I went through their clinical trial data. And as you said, I can't tell you. I signed a confidentiality

agreement, and I will honor that confidentiality agreement. But I informed the Department of Justice that I understood what happened in this case, and they subpoenaed me to come and testify in front of the Department of Justice and the FBI, to bring my computer and to bring what I knew. And tell them what I knew, what I had learned in the civil litigation into the criminal side of it with the Department of Justice and the FBI. So, I did, and six months later, I read in the paper because they keep their cards very close to their chest, that Pfizer had been slapped with the largest criminal fine for any matter in US history, about this drug Bextra. It was \$1.195 billion fine. It was the biggest at the time, and it was 2010. But like you say, I can't tell you what they did wrong.

SHAWN STEVENSON: And that in and of itself, again, it's almost ingenious that we can have entities that are run by real people that can commit crimes against other humans, and then we can't even know the details. They can pay to essentially make it go away because honestly, this information, it was here today going today. Almost nobody that I've talked to knows that this took place, and also... So, this was directly... This is on the Justice Department's website, the Department of Justice website, they announced the largest health care fraud settlement in history was Pfizer to pay \$2.3 billion for fraudulent marketing. And so it's just, again, being able to outdo themselves, but this brings us back to the information that you shared in the book with another drug, and this is Neurontin. So, can you talk a little bit about that experience?

DR. JOHN ABRAMSON: I can. And I can tell you what I know about Neurontin, because this issue was not settled out of court, and the parties did not agree to bury the data. This is again, a Pfizer drug, and I don't mean to pick on Pfizer 'cause all the drug companies engage in similar behavior as far, in my opinion. But Kaiser Health Plan sued Pfizer for its fraudulent off-label marketing of its drug Neurontin, called Gabapentin. And the reason why Kaiser was allowed to sue Pfizer is because they have a closed panel of doctors, and the information about drugs comes through the Kaiser organization, so it had been... The Kaiser doctors had been provided with Pfizer's information about Neurontin. And at its peak, about 90, more than 93% of Neurontin was being used off-label. It had been approved as a secondary anti-seizure drug and for the treatment of post-hepatic neuralgia. Post-zoster, persistent, post-zoster pain. But at the peak, 93% of Neurontin was being used off-label and 86% of the Neurontin that was sold in

the world was sold in the United States. To give you an idea of how the marketing in the United States is different from marketing elsewhere.

SHAWN STEVENSON: Can you say that number again?

DR. JOHN ABRAMSON: Yeah, 93% of the Neurontin that was used in the United States was off-label, meaning that Pfizer had not provided evidence to the FDA that the drug was safe and effective for those 93% of patients that didn't have an approved indication for Neurontin. And 86% of the Neurontin that was used in the world was used in the United States.

SHAWN STEVENSON: Sheesh. Oh, my goodness, so this is when Neurontin's being prescribed for things that is not approved for?

DR. JOHN ABRAMSON: Right.

SHAWN STEVENSON: And that's legal, but there's a catch there.

DR. JOHN ABRAMSON: It's legal for doctors to prescribe it off-label. And Pfizer was basically saying, "We don't know how that happened, we didn't do that. The doctors figured out on their own that it worked." Well, that wasn't what the jury decided when they heard the facts about Neurontin used for diabetic neuropathy and bipolar disorder, and migraine headaches, the jury decided that not only had Pfizer fraudulently marketed Neurontin off-label, but they had committed racketeering violations. It was a racketeering, a RICO charge against Pfizer for the way that it created this off-label marketing enterprise. And the jury awarded Kaiser \$142 million in penalties and then tripled it because of the RICO charge. This was the first RICO charge against a drug company, but again, nobody went to jail. The drug company didn't get dinged or penalized or not allowed to participate in Medicare, and they went on about their business.

And the amazing thing about this story, Shawn, this trial took place I think it was 2010. All this data now is... You can get my report on the web, if you go to the web and just Google Abramson Neurontin expert report, you can see all of this will come up because it was presented in court. And it shows how the doctors were duped into prescribing Neurontin off-label, which the jury found them guilty of fraud and racketeering. Neurontin is still, still the sixth is frequently

prescribed drug in the United States. So, the doctors still believe that the off-label fraudulent claims that were made 10 years ago, 15 years ago, they still believe that they're true.

SHAWN STEVENSON: First of all, they're not. Second of all, it's still making them billions of dollars.

DR. JOHN ABRAMSON: No, no, no, it's off-label, it's a generic...

SHAWN STEVENSON: Oh wait, wait. Oh my gosh.

DR. JOHN ABRAMSON: Which shows how sticky that knowledge is. Nobody's marketing it, and it's still the sixth most frequently prescribed drug.

SHAWN STEVENSON: Oh, my goodness gracious. Come on, come on.

DR. JOHN ABRAMSON: But that's such a powerful natural experiment about how the docs get these beliefs, and they just don't go away.

SHAWN STEVENSON: I think that's going to be one of the big takeaways, is how we can get ingrained with a certain perception of things and ingrained into gospel and dogma really. And I want to make this point too, for everybody who might not be familiar with this, and we're talking about a RICO charge, this is relegated to organized crime. That's what this is relegated to. And this is the first time that a "legal" drug company was charged with something as an illegal crime syndicate, essentially, to put it lightly. And justifiably so, in this instance, and what that does is it instantly triples the fine that they had to pay, but again, if this was organized crime truly in its essential state, people go to jail, people are held accountable, you don't just keep operating business as usual, and this is just nuts. Now...

DR. JOHN ABRAMSON: It's nuts.

SHAWN STEVENSON: I want to ask you about this because this is when they get caught. And as you mentioned, Pfizer and... I would make the parallel between news networks, some might seem like they've got a narrative that fits yours, but they're still interacting with you using a

very primitive psychological presentation of things to evoke fear, to create a politically-driven narrative of things and seeing life through this certain lens and missing out on all the gray, the 50,000 shades of gray. But drug companies, we have essentially the same thing going on, but Pfizer has been one of the most notorious, and I've talked about this, even with Prim Pro. That led to a near billion-dollar settlement as well, causing breast cancer and women. They were caught.

This just sounds like some movie-level villain stuff. They were called experimenting illegal drugs on children in Nigeria, and now they set up a fund for communities there, it's just like it never happened, but this is some really grotesque things and being able to continue to operate with business as usual. And by the way, that 2.3 billion from the Department of Justice, that was a felony violation, felony. If you were an individual and you commit these crimes, you're going to jail, but because of the way that our system is structured, not only are people not going to jail... And here I want to ask you this, and I already know what your response is going to be, but I just think it's important for us to think about it in these terms. If just once, when for example, Vioxx killed nearly 60,000 people that we can justifiably relate this to. 60,000 souls killed. What if people went to jail?

DR. JOHN ABRAMSON: Up to 60.

SHAWN STEVENSON: What if people went to jail, what if they had to return and pay all the money that was made and then some to the families who were victimized and essentially make an example out of them. Do you feel that this would have changed how these systems are operating in our country if pharmaceutical companies were given an example like, if we impress upon culture, if we invoke this fraud or we hide science and we get caught, we're going to go to jail for 25 years? This is a huge risk; I can't do it. Whereas now the culture is, nothing bad is really going to happen. Do you think that that would change things if just for once when these criminal things are taking place, they're held accountable in the truest sense of the word?

DR. JOHN ABRAMSON: Absolutely, absolutely. There's an email that was published by the Wall Street Journal, the day that the Vioxx study that we talked about at the very beginning, that showed that there was more than double the risk of cardiovascular events with Vioxx

compared to Naproxen. The day that Merck opened up its clinical trial data internally, when the study was over and they looked at the data, their chief scientists wrote an email that said, "It's a shame, the cardiovascular..." I'm paraphrasing, "The cardiovascular events are there. It's a shame. But the drug will do well, and we will do well." We will do well. Now, if that doesn't describe a state of mind, I don't know what would. And then fast forward, so that maybe some listeners are going to be saying, "Jeez, Abramson is right, and it's horrible. But that all happened, that was all over in 2004." But if we fast-forward to OxyContin and we've got the Sackler family declaring bankruptcy and keeping there I don't know how many billions of dollars. \$4-8 billion or something. So, they're declaring bankruptcy, they're trying to keep billions of dollars and no one's going to jail. And they've lit the fire on this epidemic of drug opioid abuse. And now deaths with fentanyl, they're responsible for a large part of this opioid crisis in our country. And they're trying to keep their money and not go to jail.

SHAWN STEVENSON: Yeah, this past year...

DR. JOHN ABRAMSON: That's not a very strong disincentive.

SHAWN STEVENSON: The past two years, and as the data still hasn't come in, but it was already ahead of pace, we've hit all-time highs in drug overdose deaths in the United States. 2020 and now 2021 is going to surpass that. And of course, if folks have seen the report with fentanyl being the number one cause death of folks between the age of 18 and 45, and this is... I went and dug into the data, and we're looking at the amount of people who died from a fentanyl overdose in that prime of life years. Also, this is like where a huge portion of our economic strength comes from as a society, is this age group. I looked at the numbers, and obviously the front-page news, the front of mind for everything is COVID 19. And in many instances, it should be. But this issue is so bad that the amount of deaths in that age group from COVID and heart disease combined in 2020 and 2021, those two years, is still thousands of deaths less than the amount of people who died from Fentanyl. In that age group. And if we had a system that actually cared about keeping these people healthy...

And by the way, if you go to... As of this recording, if you go to Dr. Google and you try to look up this devastating issue, you're not going to see major news sites that are coming up and covering this story. It's as if it doesn't exist. And you would think also because fentanyl and its

offshoots and all the illegal activity, it's not necessarily going to call out one particular drug company, but a lot of drug companies that are funding our major news networks, they have dabbled in this opioid issue. One of them being Johnson & Johnson. They were just ordered to pay part of a 26-million-dollar settlement for their contributions to the opioid epidemic. A lot of folks don't realize this, but Johnson & Johnson has been really the world's largest producer of this "super poppy" this genetically modified poppy that's used to make opiates for many other companies. They are basically El Chapo. They're basically the source of the product and then creating their own products out of it, but Johnson & Johnson has been that very strong force as far as growing the crops needed. And again, everything has its place, but what really changed things was when opiates were not just accepted but pushed to treat minor pain, mild to moderate pain, instead of the very extreme issues.

Right? So now, if you got a headache even, you can have the potential of... Or knee pain, or whatever the case might be, opiates are now on the board. Not just on the board, but actually being pressed into kind of the popular conversation. But I highly recommend people to get more of a cinematic depiction of it, they can check out Dopesick on Hulu, which is a great depiction of it, but Crime of the Century on HBO Max is a great documentary of the whole situation and looking at the Sackler family and that whole thing, but it's a really fascinating thing. But also, this issue is hurting our citizens. And really, it's because people are hurting. We have an existential issue with folks not feeling connected and feeling a sense of purpose, but also physically we're not well, which just it leans into it's another form of pain. And it also is a contributor to a lot of different types of pain and inflammation, and the list goes on and on. We're treating symptoms and not the root cause. And so this is a great opportunity for us to, let's take a step back and look at the bigger picture, and how did we get into this state in the first place?

DR. JOHN ABRAMSON: Right, and where we are. And when we look at the opioid crisis. Professor Angus Deaton and his wife Anne Case, they're both professors at Princeton, coined the phrase "diseases of despair." Where many white American, non-college-educated guys are dying from opioid overdose and suicide, and liver disease related to alcohol. And if you look in a slightly older age group than you were referring to before, in the 50 to 54-year-old age bracket, 100 people in that age bracket, non-college-educated white men, 100 people per 100,000 are dying every year from diseases of despair. I did the arithmetic, and I found out that in excess 400

people in that age group in that demographic are dying overall. 400 excess deaths per 100,000. And I communicated with Professor Deaton, the Nobel Laureate, and I said, "I'm in with the diseases of despair." And you described it exactly right, Shawn, that it's an existential problem, that its life is not working out the way they thought it would and it doesn't have the meaning that they thought it would, either with family or church or whatever the pillars of meaning are, aren't working out the way it did for their parents. They don't have the opportunities that their parents had, but there are three times more deaths from general medical problems, excess deaths from general medical problems than there are from diseases of despair.

And that's just so sad. Diseases of despair are easy. It's easy to understand that and to see that as a tragedy, but there's three times bigger tragedy just in the general health of those folks. And that gets into where we are in American healthcare. So, when I went into practice in 1980, the age-adjusted death rate for Americans was lower than in 10 comparable countries. And it was lower enough, so 88,000 fewer Americans were dying each year than in those other 10 comparable countries. And our health statistics have gotten so much worse than the other 10 countries that now 488,000 Americans are dying every year. This is pre-pandemic. This is 1300 Americans dying every day in excess because American's health is not as good as the health of people in 10 comparable wealthy countries. So, it's like we've got three jumbo jets crashing and killing all the passengers every day, every day because our healthcare and health is so inferior. And for that health, for that declining health, we are spending 7% more of our GDP than the average of the other 10 countries are for healthcare. And 7% of GDP translates into 1.5 trillion dollars a year excess. It's a \$4500 essentially un-legislated tax on every man, woman, and child for healthcare above what the other countries are paying, and their health is so much better than ours. So, it's a system that is not working.

And what Sickening, my book, is really about it's the knowledge construct that makes this look like a normal way to practice medicine, and it's not. We're outliers in the world. It's a historical disaster, and we can't go on like this. At some point, we're going to have to deal with the fact that the exceptionalism of American medicine is like the glitter of fool's gold, that Americans are suffering and dying. And we're just peeing away this money, these 1.5 trillion dollars a year, that's like 10 times more than the Build Back Better Plan that we didn't pass would have cost, every year, every year. So, what we're doing is not working. And the knowledge, the universe of knowledge that doctors believe, that consumers believe, that politicians and regulators

believe, looks at our system as if it's a prize of innovation, but what it is a prize of return on investment for the people who own the shares in the biotech industry. But it's not producing what Americans need, which is good health and well-being.

SHAWN STEVENSON: Yeah. At the end of the day, obviously, that is the goal. But for me, and I keep reiterating this recently, but I'm a big fan of results. I don't have a dog in the fight, and what I do is I just look at what does the majority of data say. And I use a logic. And also, I'm questioning, of course, where is the data coming from? And so, looking at the results, despite we could step back, we could act like we've never seen a study in our lives and just look at the state of people in our environment, the state of health in our communities and in our families, something is seriously wrong here.

And we now have a system where the FDA, I used to think about this, the Food and Drug Administration, and there's the regulation on our food and on drugs. And the crazy thing is there's so much money being made through both of those channels. The food is making us sick, and the drugs are treating the symptoms and, in many cases, making us sicker. If anything, because we're not addressing the real underlying cause, and so we've gotten into a system where... Even the title of your book, Sickening. We've got a sick care system; we don't really have a healthcare system in the true sense of the word. Let's be clear, our emergency care is amazing, we've got wonderful drugs that can help keep people alive, but the thing that is most essential about us and most important about us as people, as human beings, these are not things that are promoted. And not only should they just be promoted, but these should be top tier things that are taught in our healthcare system for us to have that study that you noted in the book with lifestyle intervention being put up against a placebo and against Metformin that had to be funded by the NIH, that had to be funded outside of pharmaceutical companies because we're not going to have a drug up against a lifestyle intervention.

And again, just say a lifestyle intervention or changing your lifestyle or having a healthy lifestyle, it can sound very... Just very light and fluffy. It just kind of has these things like, "Ah, I have a healthy lifestyle," but in reality, we're talking about real brick and mortar results with what our genes, our DNA has interacted with throughout our evolution. Our genes expect us to move.

DR. JOHN ABRAMSON: That's right. That's exactly right.

SHAWN STEVENSON: And we are the most sedentary culture in the history of the world, right now. And it's not getting better. And these are simple lifestyle interventions that might dramatically reduce our need for medications, but then here's the problem: It's going to start to pull profits from a system that is very... It's become very acclimated to siphoning money from our sickness.

DR. JOHN ABRAMSON: And our challenge, Shawn, is to figure out a way to correct this so that we're talking about improving the quality of Americans' lives, to correct it... People don't trust government. Without government, there's not an overarching mechanism to make these corrections, and we've got to come up with something new. And hopefully, our discussion is a beginning, not an end, and we can keep going 'cause we have to figure out how to create a new mechanism to... Maybe it's a constituency of consumers and doctors and non-healthcare-related businesses. I'm not sure how we do it, but we got to do it. Our country is getting torn asunder by this, and it's going to continue until we can figure out a constructive way to address these problems.

SHAWN STEVENSON: I can't let you go unless we talk just a little bit about what we can do as citizens, as people who are interested in being healthy and having healthy families. Obviously, we have a sick care system right now that we're operating within, what can we do to help to change this around to make things more ethical and efficacious? Right now, what can we do proactively?

DR. JOHN ABRAMSON: Right, so I think the way out of this is, I think there are three constituencies that are being hurt by the current economically driven, so-called healthcare system. One is the healthcare professionals who almost to a person want to do their best and want their professional efforts to improve their patient's quality of life. They're good people, they're trying to do their best. They've got to understand that they're not getting the right information. And 96% of medical research is about drugs and devices, it's not about making people healthier. That the information they get about drugs and devices, the so-called peer review is a sham because the peer reviewers don't get the data. The guidelines are a sham because the guideline writers don't get the data, and the professional organizations are

getting paid by the drug companies. The healthcare professionals need to understand that they don't have the tools to do their job and they need to become politically active, that's one constituency. The second constituency is the non-healthcare-related businesses who are paying for this ineffective health care, and they're paying approximately \$4500 or more per employee, per individual, if an employee... If there's 2.6 people in a family, they're paying some \$12,000 extra in health insurance, that's affecting their competitiveness.

So, the non-healthcare-related businesses need to act in their economic interest to become part of this coalition to control health care costs. And then the biggest and most powerful constituency is working Americans, ordinary Americans, who aren't getting a fair deal from American healthcare. And they've got to understand that the purpose of much of our healthcare is to maximize profits, not their health, and they've got to become active voters. They've got to become involved in the legislative process and be in touch with their representatives and senators. They must become part of this system. And then most of all, most of all, consumers, ordinary people need to understand that the promise of good health coming out of the next pill is a false promise. That 80% of your health is going to be determined by how you live your life. It's your responsibility. And the system should be set up so that it's much easier to get help to make those changes, but ultimately, it's each of our responsibility to do what we know to be true to achieve that better health. And the time is now. This is not going to turn itself around, we've got to make these changes.

SHAWN STEVENSON: It's wonderfully stated. Dr. John Abramson, you are one in a billion. I appreciate you so much for just having the audacity to get involved in these situations that I know it's been like a pressure cooker in many ways. I know that there's been a lot of stress involved, a lot of late nights, a lot of study, a lot of standing up for people who don't even know you're standing up for them. And I want to thank you for that. It really does mean a lot.

DR. JOHN ABRAMSON: Well, it's my pleasure, Shawn, and back at you. What you're doing to create this public forum where people can get educated about the truth of what's going on and acquire the tools to take constructive action, it's the only way out. And I hope that we can keep this dialogue going and work together and brainstorm and figure out ways to be more effective.

SHAWN STEVENSON: It's already done. It's already done. I appreciate you so much. Dr. John Abramson, everybody.

DR. JOHN ABRAMSON: Thank you.

SHAWN STEVENSON: Everybody. I need you to run, not walk, right now and get yourself a copy of Sickening. Pre-order it, because this book is going to fly off the shelves, and I want to make sure that you have it. You're the first to have this book, How Big Pharma Broke American Healthcare and How We Can Repair It. Dr. John Abramson. This episode was very special for me, personally. Again, these are different data points that I've been sharing for quite some time. And to have John in my life now, to be able to kick ideas back and forth, to talk about these things, he's gotten a glimpse into some of the data, some of the study data, trial data, that the vast majority, we're talking 99.999999% of humans have not seen what's really happening behind closed doors with pharmaceutical companies and their behavior. And we cannot do anything about it until we get educated about what's actually taking place. And also, of course, as we've talked about, we got to take a really good hard look at the results that are taking place in our lives and in our families and in our communities, and just say, "Enough is enough."

"This is not working." Things have been going in a certain direction. All that's happening in the world right now, it's not an accident, it's not just this one thing came in and messed everything up. It wasn't as if we were just gently walking downhill. We were sprinting downhill. As a matter of fact, we were falling downhill rapidly. And all the bumps and bruises along the way, nothing is really stopping us. And it's all going to shift, literally, we need to shift the world, our healthcare world on its axis, to stop this tumbling, to stop us free falling. And be able to turn this around, to be able to heal ourselves, lick our wounds, dust ourselves off and get back to a place of logic and creating a culture of health that just out pictures, that just prints out repeated instances of health, that too is possible. It's being replicated in small sects of the world, even here in the United States. There's a population of people, there are groups of people who are radiantly healthy. Many of them have come from circumstances where they were radically unhealthy. So, to say that we can turn this around is an understatement. We are powerful. We are so powerful to be able to turn things around. And so that's what this

conversation is about, getting educated, being able to say, "You know what? Enough is enough."

It's time to do something about it. Pick up a copy ASAP. And listen, again, we're just getting warmed up. 2022, we're on a mission. We've got some incredible guests and epic masterclasses coming your way very soon, so make sure to stay tuned. Take care. Have an amazing day, I'll talk with you soon.

And for more after this show, make sure to head over to themodelhealthshow.com. That's where you can find all of the show notes, you could find transcriptions, videos for each episode and if you got a comment, you can leave me a comment there as well. And please make sure to head over to iTunes and leave us a rating to let everybody know that the show is awesome, and I appreciate that so much, and take care. I promise to keep giving you more powerful, empowering great content to help you transform your life. Thanks for tuning in.