THE MODEL HEALTH SHOW

EPISODE 627

New Studies Reveal the Statin Drug Industry Is Failing to Reduce Heart Disease

With Guest Dr. Jonny Bowden

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SHAWN STEVENSON: Welcome to the Model Health Show. This is Fitness nutrition expert Shawn Stevenson and I'm so grateful for you tuning with me today. We've got a brand-new study that we're going to be breaking down here on this episode, looking at statins. All right. Now statins take up multiple spots on the top 10 most prescribed drugs in the United States, all right? Different statins from different pharmaceutical companies. It is a cash cow. It is a big money maker. Now, the viability, the efficacy, the effectiveness of statins are now being really brought into question at a whole new level thanks to this new study. And we've got on one of the foremost experts in the world in understanding statins in cardiovascular disease to help us to make sense of this new data. And also, really just do a deep dive into a drug that has become so prevalent in our culture that full disclosure, there's an appropriate place for this drug class. But what you're going to find out today is that there's a much bigger story that all of us need to know about.

Now, one of the things that our expert is going to highlight is the fact that our cardiovascular disease risk increases exponentially when we are insulin resistant. So, he's going to talk a little bit about that, the relationship with triglycerides, how that plays into the whole equation with LDL and HDL. We're going to get into all that good stuff. But one of the things that he brought up that I don't want us to look past is the fact that insulin resistance isn't due. By the way, here in the United States right now, over half of our citizens are either diabetic or prediabetic right now. That's the place that we're in right now. So, this is not something that is abnormal. It is normal, is become normalized to be insulin resistant. What is that doing? That's increasing our risk of all manner of diseases, not just chronic diseases, but also infectious diseases as well. But we're seeing that increase risk of heart attack, stroke of liver damage of dementia, the list goes on and on and on.

When we venture into a state of insulin resistance, this is not a small thing, but we have this tendency to hang our hat on the fact that insulin resistance is due to diet. Now, obviously it is a huge, huge component for sure, but there's more to this story when we're talking about our body's metabolic health and its management of insulin, because here's an interesting fact that's not so fun fact, which is just one night of sleep debt, just 24 hours of short-term sleep debt increases our incidents of insulin resistance. We become more insulin resistant and just even within three days, according to some of our latest clinical data, we see our metabolic function shifting to that of somebody who is type two diabetic. Even if we're quote healthy prior to this short-term sleep debt, it's increasing our incidence of insulin resistance when we are sleep deprived. Why does this matter? Well, right now in the United States, about 115 million of our citizens are regularly sleep deprived.

Do you think that might be feeding into our epidemic of insulin resistance? Absolutely it is. Absolutely, because our sleep deprivation creates an automatic derangement in our metabolism, whether it's with our satiety hormones. Research at Stanford affirm that just one night of sleep debt suppresses our body's production and mobilization of leptin, one of our primary satiety hormones, right? Testosterone gets kicked right in the gonads when we are sleep deprived, thyroid hormone dysfunction, cortisol goes up, the list goes on and on and on. But insulin is also not going unscathed when we're sleep deprived. So, optimizing sleep is obviously of the utmost importance today. I wrote a book on it, right? It's a national bestseller called Sleep Smarter. Definitely get a copy if you haven't already, but very practical 21 clinically proven strategies to help us to optimize our sleep. But one of the things that's highlighted, actually highlighted it multiple times in the book, but it's the importance of respecting our body's thermal regulation.

There's a natural ebb and flow of our body temperature throughout the day and through our evolution, there's a natural drop in our core body temperature at night to help us to facilitate sleep. Certain hormones are released, certain enzymatic processes for repair. Certain things change in our brain when our body temperature's going down in the evening in association with the nocturnal pattern of life itself here on earth. When things start to get darker, our core body temperature goes down. It's how we evolved. Now, today we can throw a glorified monkey wrench into that natural process.

And what the research indicates is that one of the primary thing that's underlying insomnia is an inability for our body temperature to be regulated. Specifically in the evening we're seeing folks with chronic sleep issues having a much higher core body temperature at night. And this was highlighted by a study that was published in the American Journal of Physiology. Now, a new study with this in mind was just conducted, and it included 32 participants, and they were recruited into a three-week clinical trial to see if supporting thermal regulation with their bedding can help to improve their sleep quality. Now, the researchers took subjective and objective data monitoring their sleep with devices to see the impact of their sleep conditions.

And so, the researchers utilized, some bamboo lyocell sheets, that support thermoregulation, that are antimicrobial, that are moisture wicking. And they found that, by sleeping on these sheets, the study participants had a 1.5% improvement in their sleep efficiency. What does that mean? What does that equate to? That's equating to an additional 7.2 more minutes of restorative sleep per night. Now, what if we stretch that out? We're talking 43 extra hours of sleep per year. They're still doing the same activity, still in the same bed, but not getting optimal sleep. There's a difference between getting restorative sleep and just being unconscious or just being in the bed. This simple thing, just what we're sleeping on, can improve our sleep quality. By the way, subjectively, so that was the objective data. Subjectively, the participants found that their mental alertness during the day following sleeping on these

sheets improve by 25%. And overall, 94% of people prefer sleeping on these sheets, versus whatever else they were doing before that.

Now, these sheets are from Ettitude and these are my favorite... I love these sheets so much. I didn't know that this was even a thing. I didn't know that this existed, that this mattered so much. But once you sleep on these sheets, you truly understand why, they're free from harmful chemicals, irritants, allergens or hypoallergenic and also, they're self-deodorizing, they inhibit bacterial growth, they're breathable, moisture wicking, also supports thermoregulation. But something truly special because I love these sheets so much, I actually reached out and connected with these folks and I got a 15% off discount, for our audience here. So go to Ettitude.com/model, that's E-T-T-I-T-U-D-E.com/model. Use the code model15 at checkout and get yourself some of these incredible sheets. And these are a great gift as well by the way, I get these sheets for friends all the time. I love them so much. And also, they are giving you a 30-night sleep trial. So, you get the opportunity to sleep on them, think on them, dream on them. If you don't love them, just simply send them back for a full refund. Go to ettitude.com/model, again, that's E-T-T-I-T-U-D-E.com/model. Use a code model15, altogether at checkout for 15% off.

And now, let's get to the Apple Podcast review of the week.

ITUNES REVIEW: Another five-star review, titled “health and pandemic”, by an objective listener. “I'm a big fan of your show. Thank you for using this platform, to bring awareness of the consequences and aftermath of the pandemic. I'm in the health and fitness industry and it is sad to see, how this pandemic episode has affected our younger generations, but some of us have taken it personal, to help out. Thank you again for keeping it real and giving us tools to get back to health.”

SHAWN STEVENSON: Well, thank you so much because obviously, this has been one of the most challenging things of our lifetime and I believe, that it's also presenting the opportunity for us to learn from it and for us to do better moving forward focusing on, of course, getting our citizens healthier, for decreasing our disease risk, for increasing our resilience. And this episode today, is another part of that equation. So, let's get into our special guest and topic of the day. Our guest today is Dr. Jonny Bowden and he's the bestselling author of 15 books and he actually, received his master's degree in psychology and a PhD in nutrition and is a board-certified nutritionist by the American College of Nutrition. And he's been featured everywhere in major media, including The Doctors, The Dr. Oz Show, The New York Times, O Magazine.

And the list goes on and on and on. And he's truly, truly one of the greatest teachers in this space, a mentor for me and somebody that I really do hope, that we all lift up and appreciate how special it is to learn from somebody like him, who's been in this field for decades,

operating at a high level, who's been a thought leader, who's been sharing information about like what we're going to cover today, for so many years. And now, more and more peer reviewed evidence, is coming out, supporting what he's been teaching for so long. And so, really, really special anytime I get the opportunity to talk to our special guests. So, let's jump into this conversation, with the amazing Dr. Jonny Bowden. I don't use this term lightly when I say living legend.

DR. JONNY BOWDEN: Oh, boy.

SHAWN STEVENSON: But if there was one person in my life...

DR. JONNY BOWDEN: You're going to make me blush.

SHAWN STEVENSON: That... Who that title is made for it is you Dr. Jonny Bowden, my friend, rocking the Air Force is here. No, these are Dunks. You've got on the Dunks. I've got on the Jordan ones. We're matching here with the feets. We're on the wavelength.

DR. JONNY BOWDEN: We're on a wavelength.

SHAWN STEVENSON: Yeah. It's so good to see you.

DR. JONNY BOWDEN: It's so good to see you.

SHAWN STEVENSON: Yeah.

DR. JONNY BOWDEN: The audience should know, we lived 10 minutes from each other, but the only time we see each other, is the occasional dinner and these interviews. So...

SHAWN STEVENSON: Getting in here...

DR. JONNY BOWDEN: It's the only time I get to see you?

SHAWN STEVENSON: Yes.

DR. JONNY BOWDEN: So...

SHAWN STEVENSON: Things are picking up now, good here in LA Jonny, so even right now, it's a season for me to slow down, to get in tune and just talking with you. You get... Every time, I talk with you have a connection. And it's just like, when I come to the Oracle...

SHAWN STEVENSON: If I would just do that more often...

DR. JONNY BOWDEN: It's not true.

SHAWN STEVENSON: My life would be easier. But I just want to say first and foremost, I appreciate you, I appreciate your work...

DR. JONNY BOWDEN: Thank you.

SHAWN STEVENSON: I appreciate the man you are...

DR. JONNY BOWDEN: Thank you.

SHAWN STEVENSON: And how you conduct things. And actually...

DR. JONNY BOWDEN: Right back at you.

SHAWN STEVENSON: We're fortunate enough to have you here, to discuss this new study, you actually sent my way. Brand new study...

DR. JONNY BOWDEN: I did.

SHAWN STEVENSON: On the efficacy of statins. In the new study... This was published in the peer review journal, Current Opinions in Endocrinology, Diabetes and Obesity. And the title of the study is Statin therapy is not warranted for a person with high LDL-cholesterol on a low-carbohydrate diet. Can you unpack this study and share?

DR. JONNY BOWDEN: Oh, I'm so happy to unpack this. This study was written by David Diamond, who we should know, is really a highly respected researcher and his own personal story about how he got interested in this, is very interesting 'cause he's an... He's a psychologist and at the University of Southern Florida, I think, he's head of an entire neuroscience research division and he's also a cardiovascular researcher. And that reason that he got from... Into that, was that he had all these terrible blood tests, and he was overweight, and he had never been able to... He was a college professor, and he was told that he had to take a statin. But like a lot of these guys...

They approached it with a very engineer's mind. They go, I want to understand what the statin does. Why do I need this? I know that they all recommend it, but what's it going to do and what's the mechanism? And it's so interesting to me that so many of the statin skeptics, the

cholesterol skeptics, if you will, that hold division of medicine that we're finally, we're finally getting a voice and people know about.

So many of them came from either engineering or psychology, Ivor Cummins, I'm sure you know, is one of the greatest spokespeople for that. He's a master engineer, he's a systems engineer. He goes in with a team and he figures out how the Sony computers work and how, so he's able to figure out how cholesterol works as well. And they applied these engineering analysis techniques to biochemistry, and they go, "Wait a minute, this does not add up."

And it's very funny that the people shouting the emperor's new clothes so often come from outside the field of medicine because they haven't been indoctrinated with the medical industrial complex narrative, which we can certainly get into. And... But of course, David Diamond is not the only person who is questioning this. But he has done a lot of really good peer reviewed research. It's all available.

And this particular study, what he did was he looked at people with LDL, with high LDL that the entire medical profession wants to give statin to. And he looked under the hood, which is where the action is in cholesterol testing now. It's not about LDL and HDL, it's about what kind of LDL and how many LDLs you have. And we'll get into all of that. But what he did is he took the people with high LDL, and he said, they're not all the same.

Some of these are healthy people and some are not. Let's see what happens when we divide them into healthy people with high LDL and unhealthy. Now here's the thing, "How do you define the healthy people?" "I'll tell you how he defined." So, there's a ratio, and I have been saying this for the 15 years I've been talking about this, that everybody can do. They can figure it out themselves. It's on their blood test. Even if you went to Kaiser and got your basic lipid panel, which is triglycerides, HDL, LDL, and blood glucose, everybody has that data. You take your triglycerides, and you divide it by your HDL, and it gives you a number. I'll give you an example. Triglycerides are a 100, HDL is 50. You divide the HDL into the triglycerides, you get a ratio of two. That's very, very desirable and it's more predictive than LDL has ever been.

So how he defined healthy was people who had low triglycerides and high HDL, that would make a small ratio. So, I gave you the example of a 100 divided by 50 it's a ratio two. What if you had triglycerides who were 80 and you had a HDL of 45? You're going to have less than one, 'cause 45 goes into 80, less than one. It's... Right. These people don't get heart attacks, they just don't. And in preparation for this, I decided to review some of this stuff.

SHAWN STEVENSON: Yeah.

DR. JONNY BOWDEN: I wanted to be up on this. I wanted to give you the best information. So I went back to my actual book, "Living Low Carb," from 2004, which is now in the fourth edition and has a very good explanation of how this works. And I realized that back in the '90s, I was quoting research showing that this, the healthiest older people had three measures. This is 1992 research. They had low triglycerides, high HDL, and low fasting insulin. Those are the people who lived the longest, were the healthiest stayed out of the hospital. Okay? So, we have known about this ratio number since the 1990s.

SHAWN STEVENSON: Yeah.

DR. JONNY BOWDEN: Okay. So, what David Diamond did is he said, Let's see what happens to the people who have a good ratio of low triglycerides, high HDL, but they happen to have LDL. And we'll put them all on statin. Well, guess what happened? The people who had that low ratio that I've been preaching about for 15 years, nothing, no benefit, zero benefit to taking in statin. People who were unhealthy, they benefited slightly from the statin. But not because it lowered their LDL because it took care of that ratio. That ratio is so much more predicted than LDL ever was. And David Diamond's new study shows it. So, the conclusion was if you've got LDL but you're healthy, meaning you have low triglycerides and high HDL, you will not benefit from the statin drug. That's what that...

SHAWN STEVENSON: And of course, right off the bat that goes against the narrative from the statin industry, which is a multi-multibillion dollar cash at this point actually.

DR. JONNY BOWDEN: 31 billion, actually.

SHAWN STEVENSON: And just to share this little snippet, again, I want to preface this by, you've been talking about this, this is in the newest, mini studies.

DR. JONNY BOWDEN: Oh, it's not... I'm not, I won't take, there's a bunch of people who have been sounding me alarm on this. Thank you.

SHAWN STEVENSON: You've been one of the foremost voices in this and this is another study that's affirming what you've been trying to teach us. And so, this particular, and this was a meta-analysis that he did looking at a ton of different studies.

DR. JONNY BOWDEN: Right. That's when they look at tons of studies and they see what can be gleaned from looking at them as a whole.

SHAWN STEVENSON: And this included a variety of placebo-controlled studies in this particular meta-analysis that he did. And he found that LDL alone was quote, "A very weak association with heart disease and stroke."

DR. JONNY BOWDEN: Exactly. Exactly.

SHAWN STEVENSON: Come on. This is, but this is the thing that you look for in a conventional mindset, conventional panel, LDL is high, let's put you on a statin. And also, you mentioned...

DR. JONNY BOWDEN: It's 1963 medicine.

SHAWN STEVENSON: Yeah. And furthering that, he said that again, as you already stated, optimal triglycerides and HDL taking...

DR. JONNY BOWDEN: That's the numbers to look at folks and here's what's good about that... We're going to get into this. There's a better cholesterol test than good and bad. It's hard to get your doctor to order it. We'll talk about it in a second. But the point is, you don't have to order a special test to get out what your ratio is. You have it in your hands. If you've ever had a blood test, you know your triglycerides, you know your HDL, do the division. It is really easy. And that's available to everyone. Your doctor doesn't have to agree or not agree. Doesn't have to, they don't have to order a special test. It's right there.

SHAWN STEVENSON: Now, here's the other part of this is that, as you mentioned, taking a statin provided no benefit for folks who...

DR. JONNY BOWDEN: To people who...

SHAWN STEVENSON: Even if they had high LDL.

DR. JONNY BOWDEN: Correct.

SHAWN STEVENSON: They had optimal triglycerides and HDL. Now, the other side of the equation, which you reference here, is indicating the potential downside and adverse effects by putting folks on a statin who really, really don't need a statin. And this included development of diabetes, damage to the muscles and kidneys and impaired brain function.

DR. JONNY BOWDEN: Oh, I guess we're going to get into all this.

SHAWN STEVENSON: Absolutely. We got to. We got to.

DR. JONNY BOWDEN: We've got to. Show and tell stuff for that.

SHAWN STEVENSON: Yeah.

DR. JONNY BOWDEN: So, this is the point, you and I, if we had a life-threatening disease and they said to us, "Look, we've got this drug, you got a good chance of saving your life. But it comes with a lot of side effects." And you go, "I've got a good chance of having my life saved. I'll take the side effects."

If there's no benefit to a drug, if it's not going to save your life, if it's not going to extend your life, if it's not even going to be useful in your particular case, why would you sign on for a list of side effects this long? And that's what statins have. Remember if this is not anti-statin, it's anti-statin overuse that we're standing for, and we got criticized a lot with the great cholesterol myth. Oh, they're anti-statin. No, we're anti the medical industrial complex that keeps trying to extend the market for their product. That statin drug was developed for middle aged men who had previously had a heart attack. Now, please understand this. That is called, that's called secondary prevention. We are trying to prevent you from having a second heart attack. That's secondary.

You've already had one. We think this drug will reduce the risk slightly of you having a second. That's what it was developed for. That's what the original research showed. A mild benefit was not an overwhelming benefit. You could get that benefit with a few lifestyle changes, which we'll talk about. But it did show some. It showed none in children. It showed none in older people, zero in people over 75 wasn't even tested on women. This is all relatively recent where they're trying to expand the market for it. And now you have doctors saying, "Let's... Mrs. Jones, let's get your 13-year-old on a statin drug 'cause he's got some high cholesterol there." And we got to cut this off at the pass. So, it's the putting the statins in the water supply mentality that I am so incensed about because you are talking about a drug that has sexual side effects. And I'm sure we'll get into that, that gets everybody's attention, memory side effects, pain myopathy, memory loss. There's a lot of side effects. And you and I would take the chance if it was going to save us from stage four cancer, but this doesn't save us from that. And in many cases, this drug is being prescribed with no indication that it's going to do any benefit.

SHAWN STEVENSON: Let's talk specifically about this extending our lifespan, because just in talking with you, it sparked a question in my mind.

DR. JONNY BOWDEN: Good. Write them down. I love questions.

SHAWN STEVENSON: So, I went and looked this up. And on this episode, everybody who's listening to the audio version, it'd be a good idea to pop over to YouTube. We're going to put

a lot of studies up on the screen for you. This was published in the BMJ, one of the most prestigious medical journals in the world.

DR. JONNY BOWDEN: Let me guess so, it's hard to come by.

SHAWN STEVENSON: And this one is titled The Effect of Statins on Average Survival in Randomized Controlled Trials and Analysis of Endpoint Postponement. So, it's looking at how statins can possibly extend your life. Now, this meta-analysis, they did a great job of really zeroing in on people who qualify in their analysis, and it included about 92,000 patients, which is a robust data set.

DR. JONNY BOWDEN: Yes.

SHAWN STEVENSON: Here's what the study found. The study found that statin use was shown to prolong life between minus five days and 19 days, minus five days and 19 days, that's primary...

DR. JONNY BOWDEN: In other words, there's no major effect whatsoever on mortality.

SHAWN STEVENSON: Right. And we're talking days here, but also, again, some of them found that you're going to lose five days, and secondary prevention trials, which is what you talked about.

DR. JONNY BOWDEN: Trying to prevent a second heart attack.

SHAWN STEVENSON: Life was prolonged between minus 10 days and 27 days for all the potential side effects that you're going to have. Losing quality of life itself and barely, if at all. And possibly even reducing your lifespan. When you actually look at the real numbers, something is not adding up here.

DR. JONNY BOWDEN: Something isn't adding up at all. And I would argue that if we paid for our own medications, if we were, if it wasn't just, well, insurance pays for it and we had to actually do a cost benefit analysis and say, I'm paying that much even 30, 40, $50 a month for this drug.

And what were those statistics again Shawn? Well, I might get five extra days if I take this for the next 10 years and I'm going to have these side effects, I don't think I'm going to buy that medicine. But now insurance pays for it. Everybody just takes it 'cause the doctor says to take it. And I'm telling you, I played, you know, I'm an avid tennis player and I play with people literally 14 to 89. So, there's a lot of old people in that group and there are a lot of men that

are on statin drugs that don't need to be. And they come in, they go, Man, I've had such muscle pain since I got on that Crestor. The doctor says, it's not that I've had such memory loss since I started that, but my doctor says I'm just getting older, it's mild cognitive impairment. They don't need to be. And I see the symptoms every single day.

SHAWN STEVENSON: Yeah, yeah. Let's dig in and talk about this because with, even within Dr. David Diamond's study, he mentioned, this is a direct quote, "Certain statins have been linked to cognitive impairment.

DR. JONNY BOWDEN: Oh, yeah.

SHAWN STEVENSON: Because they interfere with the brain's ability to produce cholesterol, which is essential for the creation of new brain connections and to form memories.

DR. JONNY BOWDEN: Memory, thinking, everything is affected, cholesterol is needed in the brain. I have been apoplectic on podcasts and interviews when I talked about these doctors who are trying to put 13-year-olds on statin drugs. Your kids' cerebral cortex doesn't come online until he's 25. That's the executive function. It's not even physically developed 'til you're 25 to put a kid on statins where cholesterol won't be manufactured in the brain where it's needed for cell membranes from thinking, from memory is such malpractice that they should be just taken, their license should be taken away. It's not always their fault. 'Cause they've been so well marketed. These companies are so good at marketing, and they market to doctors, and we could get into that whole thing and talk about that. That's another rich pot of information that people really aren't aware of how doctors get their information.

SHAWN STEVENSON: Yeah, let's talk about it. Let's talk about it.

DR. JONNY BOWDEN: But that's one of the reasons why the statins are a $31 billion industry and why it's not likely to change anytime soon.

SHAWN STEVENSON: Yeah. Because the framing is that they're innocuous, they're, you know, it's so simple. It's like, again, the talk, and you said this earlier, but I don't think people really realized like that was actually in potential litigation to be a thing putting statins in the water supply because it seems so.

DR. JONNY BOWDEN: Wasn't really I was making, I didn't...

SHAWN STEVENSON: No, it was not a joke.

DR. JONNY BOWDEN: I thought, I heard a doctor, a very respected doctor who in other areas I respect, and I thought, oh my God, this is like...

SHAWN STEVENSON: I mean, we got fluoride in the water.

DR. JONNY BOWDEN: He went on television and said that. I think it's the greatest drug ever. We should put it in the water supply.

SHAWN STEVENSON: Yeah. Just the same thing with fluoride. It's just all, this is, it's just going to, it's all benefit, but it's without any form of consent.

DR. JONNY BOWDEN: It's not all benefit. It's not all benefit.

SHAWN STEVENSON: Right. It's just another one of those things where we have this public medication coming through the water supply, not to mention all the other stuff that's there now. Through just the process of metabolism and that whole thing with all the pharmaceuticals that we're consuming, all the environmental toxicants that are finding their way into our drinking water. And we'll throw up a study on that as well for everybody. And this huge analysis was done from coast to coast and finding there are dozens of pharmacological...

DR. JONNY BOWDEN: Agency.

SHAWN STEVENSON: Residues.

DR. JONNY BOWDEN: Yeah. Of course.

SHAWN STEVENSON: Metabolites...

DR. JONNY BOWDEN: I have known that forever.

SHAWN STEVENSON: Antidepressants. Anti-cancer medications, you know, chemotherapy, this is coming in our water supply.

DR. JONNY BOWDEN: NSAIDs, over the counter stuff, birth control pills, all this stuff that's innocuous and it all comes into the body and has to be detoxed by the liver and it has downstream metabolites and other things. I heard this wonderful analogy for the American medical system. You got this cliff and it's a notorious traffic thing and people fall off the cliff constantly. And what you got is a great system of ambulances and they literally wait there at the bottom of the cliff and they're shiny and they're new and they got all this stuff, and they whisk you off to the hospital and they can put people back together after falling off this cliff.

That's our medical system. Nobody is talking about putting guardrails on the top of the cliff. Nobody is talking about that. It's not covered by insurance. We could put some guardrails up there and guess what?

People will stop falling off there and then that whole system isn't quite as necessary, yet all of our focus in medicine in America, all the things you hear about, oh, we have the best medical, we have the best sick care in the world. We have the ability to find the best sick care. If I'm in a God forbid, a traffic accident, I want to go to Cedars-Sinai. That's, you know, I'm not going to an herbalist. But we have zero ability to prevent these diseases, this epidemic of what we call diabesity because diabetes and obesity are joined like a horse and a carriage.

SHAWN STEVENSON: Yeah.

DR. JONNY BOWDEN: And we have no ability to treat that or to get treatments that are covered by insurance. They just don't exist. What we do is we get better ambulances to take them to better places to keep 'em functioning.

SHAWN STEVENSON: So, Dr. Jonny Bowden here today, are you saying that we have a Humpty Dumpty Medical system?

DR. JONNY BOWDEN: We have a very frightening medical industrial system in which the pharmaceutical companies and the insurance companies control most of what happens in our healthcare and it's in the wrong hands.

SHAWN STEVENSON: Yeah.

DR. JONNY BOWDEN: You know, we were talking earlier, we're probably going to bounce around a lot like this. We talked earlier and we mentioned that there is a better test for cholesterol. It's existed for 15 years. It looks at, see when, let's go back and look at how we got into the insane notion of good and bad cholesterol to begin with. So, in the beginning, you know, when I was a tiny little kid, they had health fairs and they, people were just getting aware of what cholesterol was. They thought it was, you know, a big part of heart disease. And there was a public campaign to get yourself tested.

And they would have these health fairs where you'd learn about things like fitness, going to the gym, getting your cholesterol tested, and there'd be a little booth there. And the doctor would do a little blood prick for you and put it on cloth, oh, Mrs. Jones, your cholesterol is 235 that's very good because in those days, 240 was considered the norm. And they give you a single number. And as the years went on and microscopes got better and technology got better, they realized, well actually cholesterol doesn't travel in the blood. It can't, it's

hydrophobic. It doesn't mix with water. It has to travel in a container, the container is the lipoprotein. So, LDL, that second L stands for lipoprotein and HDL the second L stands for lipo. Those are the containers. Cholesterol are in the containers. So, they realize these containers are kind of different.

The HDL one looks a little differently. It has a higher density. It floats to the bottom of a liquid. If you look at it in a microscope, the low-density ones, they have a different weight. And so, we decided to kind of classify them not just as total cholesterol, but HDL and LDL and through very mystical, kind of like looking at things from, they thought that HDL kind of does better things and the LDL kind of doesn't. So, let's call the LDL bad and let's call the HDL good. So, this is 1963 thinking. First of all, it's the same cholesterol. It's like a passenger on a train. You're on a different train, but you're the same guy. So, cholesterol is not different when it's carried in an HDL or an LDL. It's the same cholesterol. That's number one. Number two, and I guess the best way to explain this, this carrier versus cargo thing. If you've got trucks carrying cargo, going down the roads and you're trying to prevent traffic accidents, what's the thing you want to know how many trucks are on the road. Do you care how many boxes of Kleenex they're bringing to Walmart. Do you care what the cargo is or they're transporting beer. Well, how many beers are in there? We don't care about the cargo. We want to know how many trucks are coming down this highway, 'cause that's what's crashing into each other, right? Those who... And we want to know also what's the size of the trucks?

A little minivan less damage than an 18-wheeler rolling down the thing. So, we need to know size, we need to know amount. That's what the new cholesterol tests. They look at the lipoproteins, not the cargo, not the cholesterol that they're carrying, but the actual number of lipoproteins, 'cause that's what crowds up the bloodstream. If you got tons of them, they're more likely to bump into each other. There's more likely to be accidents. And we have a test now called LDL-P for particle for the number of lipoproteins. That is a valuable piece of information that does predict events. Doctors won't order the test. They stick with the LDL and HDL.

SHAWN STEVENSON: This goes back to tie in something very important here, which is how this system is constructed to where these tests. Even if a doctor would have the audacity to do this, is it going to get covered by insurance.

DR. JONNY BOWDEN: I'm so glad you brought that up because that was my next thing. I used to go on these podcasts, and I would get visibly shakingly angry at the doctors that won't order these tests. How can they be so stupid? How can they be so stuck in 1960s medicine to not know that we now know that LDL comes in big sizes, little sizes and intermediate sizes, Thousands of particles, hundreds of... That information is there. How can they not order that? How can they not know that? And then as I learned more about how the pharmaceutical

industry works, I realized it's not them at all. It's the insurance companies. Because here's what's happens and whistleblowers, this is in freedom of information documents. You can... I can give you references for where you can hear people speak about this, who have been in this industry.

The doctor orders the test, the insurance company says, "Why are you ordering this more expensive tests? They don't need this." And he says, "Well, yes they do because blah, blah blah, blah, blah, blah." If you continue to order these tests, they say your contract will be reevaluated. The doctor thinks so I'm going to lose Blue Shield. No thanks. And they will not order it even if they believe it to be true. So, there's two issues, one is, they don't even know that you need that test. And two is if they do need it, they do know you need it, they're not able to order it.

SHAWN STEVENSON: Yeah, they'll lose their business potentially.

DR. JONNY BOWDEN: They will lose if Blue Shield walks out, 'cause you just... It's like insurance. It's like if you put too many claims in on your car, they drop you. Well, health insurance, if the doctor puts in too many requests for tests that aren't covered or they don't want to cover or they're little more expensive, they won't cover you.

SHAWN STEVENSON: That is, man, that's so heartbreaking.

DR. JONNY BOWDEN: It is, now the good news...

SHAWN STEVENSON: We've allowed this system to be created.

DR. JONNY BOWDEN: We have and I'm not a politician. I can't even imagine what you need to do to change this. But I do know that people can order these tests on their own and that there are alternative ways to get 'em. And there are doctors who will be more friendly to ordering the better tests that can give you valuable information, but they're more expensive. So how do you deal with that? I don't know. I just know the old tests aren't working. I can tell the Emperor has got no new, is naked. But I don't know how to dress 'em. I don't know what we can do to fix it.

SHAWN STEVENSON: Oh man, this is important. Again, this is tying in an important point that, if we really just take a step back and look at how the system is constructed and we see the political aspect, we see the pharmaceutical aspect that the pharmaceutical industry, which is again, this is a trillion-dollar industry, multi-trillion-dollar industry that's profiting from the Pharming of sick people. But then we've got to see the integration with insurance companies who are really kind of the Goliath in all of this.

DR. JONNY BOWDEN: There are, there are five big ones, and they control all of it. They really do. I, when we talk about big pharma, it's very easy to make them the bad guys because they are most of the time. I did a tiny little bit of research before coming on last night. Just look at how much big pharma has paid in fines. Wait. Wait. It gets better for either lying outright for mismarketing, for encouraging doctors to use it off label, which is just like, hey, I know it's not authorized for this, but a lot of patients are telling us it grows here. You might want to try that. They can do all of that. So, I just took a little sample of 2004 to 2012, a random eight-year sample, $17 billion for those eight years. And that's every one of them.

Pfizer, Merck, every Johnson & Johnson, 17 big. So over eight years, that's over 2 billion a year. Go back to the '80s and go up to now and think of the number of billions of dollars they've gotten in fines for lying and misrepresenting their products and concealing safety data. And now think of the phenomena that for the last two years we've said, "Oh no, these guys don't lie. They want to save the world. They have no money motivations." And we can't... If you even ask about their motivations or about their financial interest in this policy, and you're going to be de-platformed and demonetized from YouTube. So, I don't understand how knowing this and having seen this in the cholesterol playbook for 25 years. And I've seen in other playbooks, I mean, Vioxx was a great example. People died because of Vioxx. And that's all...

SHAWN STEVENSON: 40 to 60,000 Americans die.

DR. JONNY BOWDEN: Because of biopsy. Because they concealed heart disease or heart attacks in the group that was tested on. We suddenly thought they're all Mother Teresa. They're all, oh, they would never lie about the vaccine safety. Never. How could they do it? What are you talking about? It's the same people.

SHAWN STEVENSON: Exactly. Yeah.

DR. JONNY BOWDEN: So, yeah, I know we don't want to get into all of that. But the point is, this industry is not our friend. They're not out there going; how can we make the world healthier? How can we prevent heart disease? Lowering cholesterol is not the same thing as lowering heart disease. That's a take-home.

SHAWN STEVENSON: Yeah.

DR. JONNY BOWDEN: You are lowering a lab value, that lab value does not summarize your risks, Shawn's risks, Jonny's risks for having an event, for having heart disease or for dying early. It doesn't. It's one single lab value taken out of context. Why is there so much attention on it? 'Cause we can change that lab value. $31 billion a year is spent on changing that lab value. It doesn't prevent heart disease and it doesn't extend your life. You brought up those mortality

figures. That's just one study like that. There are many that look at, here's the control group, here's the statin group. Let's see what happens. Oh, we had two less deaths from heart disease in the statin group. That's great. Let's just tell them about that. But oh wait, you had two more deaths in the control group for this and the statin group had two more deaths from cancer. Oh, well let's not talk about that. Let's just say we saved two deaths from heart disease. As John Abramson once said, you know what? Dying from another disease is not success in terms of, if treatment for one disease is the death from another, it's not really a great result, right?

SHAWN STEVENSON: Exactly. Exactly. Wow. Thank you so much for sharing this because it's a logical fallacy that we carry.

DR. JONNY BOWDEN: Doesn't extend life.

SHAWN STEVENSON: If we don't first come from the perspective of this industry itself is really built on the medicalizing just basic human function and emotion. Right? So, medicalizing our emotions, medicalizing our symptoms versus actually removing the cause of these diseases and basically pharming sick people. It needs that, it requires that for its robust performance, right? We've got to get that piece and the fact when you just mention those fines over that span of time, those are just the things they got caught for.

DR. JONNY BOWDEN: This is something they're caught for.

SHAWN STEVENSON: We're talking about billions of dollars every single year for fraud.

DR. JONNY BOWDEN: Cost of doing business.

SHAWN STEVENSON: For killing people, for lying, for bribing government officials. The list goes on and on and on. These are the things they get caught for but we're missing out on the things. Number one, that they have found a way to finesse but also even with those fines Jonny, you know this, that is nothing to them. They account for that because if they can profit 10 billion and pay a $1 billion dollar fine, guess what? We made $9 billion dollars.

DR. JONNY BOWDEN: Let me bring this down to reality for an ordinary people. I lived in New York most of my life. So, in New York the streets are very crowded and the delivery trucks they have to double park, or they can't deliver anything. So, they clogged the streets through double parking. The meter aids come along, they ticket, they ticket, they ticket. The truck drivers put 'em in the back, put 'em in the back, put 'em in the back, and they all look at it as the cost of doing business 'cause it would cost us more to not be able to deliver than it does by paying the fines and the tickets. They just build it into the budget. That's what these drug companies do. They lie, they cheat, they do all of this stuff and if they get caught a couple

billion, but they made 9 billion on the profit. Perfect example, the movie Dopesick. Dopesick, I recommend it's an... I think it's HBO.

SHAWN STEVENSON: Hulu. Hulu.

DR. JONNY BOWDEN: Huh?

SHAWN STEVENSON: I think it's on Hulu.

DR. JONNY BOWDEN: Hulu, whatever it is. Dopesick with Michael Keaton is the, it's not fictionalized. It's a true story, but it's not a documentary. It's a scripted true story. Like in Cold Blood was, and it tells the story of the Sackler family and OxyContin and how they literally engineered an opioid crisis in America. They literally engineered addiction. In all they show you how they, it's called detailing. They send pharmaceutical reps out to the doctors, they take 'em out to dinner, they become friends with them. I wouldn't lie to you, oh, look what our study is showing this, and you know what our patients are telling us that it's really like, and they seduce and they do all this and they incentivize and before you know it, there is an enormous market for this drug. That's how they work. And I think the biggest takeaway from that book Sickened, which I recommended to you last time by Dr. John Abramson, is that we have to understand that these pharmaceutical companies are answerable to their investors. They have to make their numbers, every quarter they have investor meetings, they have to make their numbers. That is the main, absolutely main and primary purpose of every one of these doctors.

We got Freedom of Information Act documents from Pfizer during the whole pandemic. It said, you must understand that, I'm paraphrasing, but this is out there, and you can find it, they basically said, you have to understand that every statement coming out of Pfizer is for one purpose and that is to sell product.

SHAWN STEVENSON: Yeah, yeah. Even with the Sackler family again, same scenario. They get this big fine, but they profited so much.

DR. JONNY BOWDEN: I think they made 9 billion, they paid 3 billion in fines. I'll take that deal any day.

SHAWN STEVENSON: Yeah. Yeah. This is, and again with the amount of money here is like beyond...

DR. JONNY BOWDEN: It's beyond.

SHAWN STEVENSON: Our understanding as a human who's just you know, trying to live your day-to-day life. But one of the really interesting things that they did, and by the way, so you mentioned that series on Hulu, so you could see more of you know, Michael Keaton in his bag but then there's also Crime of the Century on HBO Max which is documentary style articulation of it.

DR. JONNY BOWDEN: Oh. I didn't know about that one.

SHAWN STEVENSON: One of the things that came to light for me in seeing this documentary was how when these individuals started to basically become desensitized to the amount of OxyContin they were getting over time and also, they were getting addicted, what they did was they made this pivot because again, they were just raking in the money. They were saying that, okay, you're saying your patients are getting addicted. Wait a minute, that's not possible with this drug because we said that and what they're really experiencing is breakthrough pain. They actually aren't getting enough OxyContin; you need to up their dose. They literally created the framing of something called breakthrough pain because this drug was supposed to stop their pain, but they're having breakthrough pain. And now to date...

DR. JONNY BOWDEN: Like we had break breakthrough like we had breakthrough infections.

SHAWN STEVENSON: Breakthrough infections, just made up. It's just made up. It didn't work. That's what that's called. It didn't work.

DR. JONNY BOWDEN: You can't say that.

SHAWN STEVENSON: But now here, you just need another one or you need to shut your mouth.

DR. JONNY BOWDEN: Or you need a booster or three or four or six. They're up to four in Israel. How far do you think they're going to go?

SHAWN STEVENSON: Got a quick break coming up. We'll be right back. No lifts, no gifts. Here are just a few benefits of building muscle seen in peer review studies. Building some muscle mass can significantly improve your insulin sensitivity, improve your overall hormone health, improve your cognitive performance, improve your immune system, protect you against injuries and speed recovery, and defend your body against age related degradation. This is just a small slice of what a little bit more muscle can do. Now the barrier of entry to building more healthy muscle and reaching a state of physical fitness is easier than ever. Having a few key pieces of equipment at your house can absolutely change the game for you. Kettlebells, Steel clubs, Maces, battle ropes, all of these phenomenal multifaceted pieces of equipment are

readily available to ship directly to your door. Go to onnit.com/model and you're going to receive 10% off some of the most premier training equipment in the world.

Simple piece of equipment that you can do dozens if not hundreds of different exercises with, plus they've got incredible programs as well to teach you different techniques for unconventional training to truly create more functionality in your health and fitness. On top of all that, Onnit is also one of the world leaders in human performance nutrition. They've got the most remarkable pre-workout supplements and post-workout protein that you're going to find, all sourced from earth grown ingredients, nothing synthetic. They also have put their own products into real world clinical trials to affirm their efficacy. Again, go to onnit.com/model, that's onnit.com/model for 10% off everything they carry. Now, back to the show.

SHAWN STEVENSON: Again, this is a big overarching conversation, but we want to dig in a little bit more here with this same kind of narrative happening with statins. So, I'm going to mention another piece here and I'd love for you to talk about this, Jonny. So.

DR. JONNY BOWDEN: Can I just sum up something?

SHAWN STEVENSON: Oh, sure. Absolutely.

DR. JONNY BOWDEN: For a take-home for what we've been trashing, the medical system, the insurance company, and it is as bad as we've been saying. I think the advice that anyone could take so that they're not hopeless, is the longer you can stay out of the medical system, the better it is. And, I say that as someone who has used drugs, I had hepatitis C. I had it for 25 years. They came out with an eight-week thing that I investigated, I tried, I had zero viral load. There are wonderful drugs like that. Metformin is a wonderful drug. Telmisartan, and not right. But to the extent that you can stay out of that system, you will be doing yourself such a favor. And you hear this even from pharmaceutical reps who say, look, all I can tell you is it's just stay out of it if you can. And that means learning from people like you and me and other people who are teaching lifestyle changes so that you don't need all this stuff. You don't need to medicalize every emotion, every thought, every ache.

I talked to my tennis coach the other day 'cause I've shoulder hurts from time. And I said, you know, I don't know. Is this chronic pain? He says, Dude, what are you talking about every athlete, I've got six of 'em like that. There's, there is something to be set for teaching resilience, for teaching people how to cope with things and to be stronger rather than to try to keep all the little microbes out and, become like bubble boys. We don't want to really do that. We did it for the last two years. I think it was an ill-advised policy. I think we would've been better to target vulnerable populations and really, and let the world stay open while we learn to build better immune systems and to, to get healthier ourselves.

SHAWN STEVENSON: And also, to learn what the symptoms that we might experience what they're trying to teach us.

DR. JONNY BOWDEN: Yes, it's different...

SHAWN STEVENSON: It's not indicating that we're deficient in a drug 99.99999% of the time. Right? Again, this is, you're bringing something important that I want to mention. This is an important sidebar, which is there are countless great people who are working in these industries.

DR. JONNY BOWDEN: Countless.

SHAWN STEVENSON: Who mean to do well, who are passionate about the work.

DR. JONNY BOWDEN: Absolutely.

SHAWN STEVENSON: But you've got to understand that if you take a passionate, smart person who's a good person and you teach them the wrong thing...

DR. JONNY BOWDEN: Yes, there are many very well-meaning people who literally believe they are saving lives by giving someone with a 206 total cholesterol a statin drug. They believe it.

SHAWN STEVENSON: So, this gets us to this point here, which is you, we mentioned a little bit earlier the significant increased risk of cognitive decline, but also diabetes. This was published in current diabetes reports, is a direct quote. Statin therapy increases the risk of diabetes by nine to 12% in the two metanalysis of statin trials themselves, and by 18 to 99% increased risk of developing diabetes on a statin in five population-based studies. Statin therapy impairs insulin sensitivity and insulin secretion based on clinical and epidemiological studies.

DR. JONNY BOWDEN: Well, if we get into insulin resistance, we're going to be here for several hours. 'Cause this is my passion. Should we just do a quick thing of what that is and why it's important?

SHAWN STEVENSON: Yes, please.

DR. JONNY BOWDEN: All right. So, insulin resistance is the great metabolic plague of the 21st century. 88% of Americans have some degree of insulin resistance. Insulin resistance underlies every chronic disease we know of, starting with hypertension, diabetes, obesity, heart disease, Alzheimer's disease. And when the pandemic was going on, I was noticing, wow, insulin

resistance underlines like half the comorbidities. What about the other three? The liver, lung and, and kidney ones. And I did about a morning's worth of research...

On PubMed, The National Institute of Health Library to see what the connection between and some resistance in these other things was. Every one of them is statistically related to insulin resistance. Insulin resistance are the termites in your body that are just destroying the structure and you just wait for the house to fall down, and most doctors don't see the signs 'til the walls are crumbling. But you can see insulin resistance, you can test for it 10 years before your doctor says, "Your blood sugar is really going up, that A1C is not looking so good. Or wait, blood pressure is really high. Your cholesterol's through the roof." That's late-stage stuff. It starts with insulin resistance, and I'll explain what insulin resistance is but the point to know is that it is a dysfunction in how we metabolize carbohydrates, and it exists... It's endemic in the population and it leads to everything bad.

And if we had one message in The Great Cholesterol Myth, Steve Sinatra and I, in the revised version, it's that this is what we should be looking at, not LDL cholesterol. We should be looking at markers for insulin resistance, which by the way, is just a technical name for pre-diabetes. So, everybody knows there is such a thing as pre-diabetes. That's pre-diabetes, and guess what, Shawn, diabetes is pre-heart disease, so this is one long metabolic continuum, and it starts with that. And that's why I talked about it in Living Low Carb, and then we talked about it, and as we saw the research that came in since the 1970s that has linked this, that nobody talks about, 'cause it's so easy to lower LDL cholesterol but it ain't so easy to lower insulin resistance without using things that doctors don't tend to use like diet, investing in improved sleep.

SHAWN STEVENSON: Yeah.

DR. JONNY BOWDEN: You wrote a book about sleep. Did you know... Or let me remind you, you probably know this, but let me remind the audience, the book that you wrote about sleep, if you deprive college sophomores of sleep for three nights in a row, and I don't mean all-nighters, I mean you just screw up their sleep, you wake them up in the middle of night, they get one hour less than they should, two hours less than they should, right? Three days and you've got all of the signs of insulin resistance right there, metrics right there in the blood test.

SHAWN STEVENSON: Yeah. And as little even as 24 hours of sleep deprivation turns into that.

DR. JONNY BOWDEN: Can elevate some of those markers, which is why every great coach, in which I include you and myself, has realized that this is not just about how much you eat and how many hours you put on the StairMaster. If your sleep is screwing up your hormones, I don't care what you eat, it's going to be stored as fat.

SHAWN STEVENSON: Or what drugs you take.

DR. JONNY BOWDEN: Yes. Yeah. So, these things are so important, and going back to me saying stay out of the medical industrial complex as long as you can. These things are things that we can implement in our lives right now. Taking sleep seriously, taking stress reduction seriously, taking eco-therapy, just being outdoors in greenery has a metabolic effect, can you imagine? And of course, checking what you eat and how you exercise. I'm a big believer in both, but they're two out of five big pillars of health. And that's why even in The Great Cholesterol Myth we spent a third of the book on the stuff that isn't related to diet and exercise, sunshine and HeartMath, and relationships and community, all of this stuff has been shown in peer-reviewed papers to have a positive impact on your metabolism and on your risk for heart disease and we don't talk about that, we talk about lowering LDL cholesterol. I'm done with my rant.

SHAWN STEVENSON: So powerful Jonny, listen...

DR. JONNY BOWDEN: I know you had specific questions and I got all into the...

SHAWN STEVENSON: This actually ties in perfectly because this goes back to the very beginning in this new study that you sent me. Again, this is publishing current opinions in endocrinology, diabetes and obesity. The title of the study was Statin therapy is not warranted for a person with high LDL cholesterol on a low carbohydrate diet, and specifically indicating that it's really high triglycerides...

DR. JONNY BOWDEN: And lower HDL. Bad combo, not a good combo.

SHAWN STEVENSON: Low HDL. So, this is the tie-in right now with insulin resistance, with high blood sugar and triglycerides.

DR. JONNY BOWDEN: These are the numbers to be looking at.

SHAWN STEVENSON: So, let's talk about triglycerides and how deranged blood sugar is an ingredient in that.

DR. JONNY BOWDEN: So, triglycerides are storage form of fat. 95 to 99% of the fat in your body is in the form of triglycerides, 95 to 99% of the fat that you eat is in the form of triglycerides. So, what's a triglyceride? It's three fatty acids joined together with a molecule of glycerol. You've got a backbone of glycerol which comes from sugar, it's got three fatty acids hence triglyceride and we measure it in our blood stream. And every test, as I said in the very beginning, every test, even the most basic test you get from any HMO is going to have triglycerides, HDL, LDL, and glucose. And triglycerides, high triglycerides, are a risk for heart

disease, they are a risk for every kind of cardiovascular disease you want, and we don't talk about them enough from... I'm not sure exactly why, I guess because we got this great way to lower LDL, so we'll talk about that. But triglycerides can be brought down. It is the easiest thing in the world to drop your triglycerides. It is so easy that I would bet my... I bet... I would do a bet for anyone if they followed what I'm going to tell them. If their triglycerides didn't drop, I don't know what I...

SHAWN STEVENSON: It seems like you stopped yourself from betting like, oh, I would run down the street naked.

DR. JONNY BOWDEN: Because it's always going to be... There's always going to be some exception to this rule, but in 99% of the time, triglycerides drop like a rock on a low carb day, bam. Why, you ask? Because all that sugar is turned by the liver into triglycerides. The more sugar... It's not the more fat you eat, the more triglycerides. The more sugar you eat, it takes that glycerol thing and says, "What am I going to do with this? I can't have high blood sugar, that's going to kill this guy. What am I going to... I'll just package it somewhere else." And we take the fat. We make the fatty acids, we stick them onto the glycerol, we get it out into the blood stream, and now you've got a high triglyceride. It is a function of how much sugar and starch you eat. When you stop eating that, guess what? The liver doesn't have anything to work with and your triglycerides drop like a rock, which by the way...

For those who aren't going to have their eyes glaze over by some simple math, HDL is hard to raise, let's be honest. And they always tell us exercise will raise it. I've never found that in my life. I have a relatively stable 40, which isn't a great number. I haven't been... I exercise two hours, at least two hours a day between tennis and walking and the gym and I have never been able to budge that number. But look, if you have high triglycerides and low HDL, you are in that high-risk thing that David Diamond talked about in his study. That's the ratio. Then you got like 150 triglycerides and a 30 HDL, you've got a ratio of five, that's heart attack waiting to happen, right? What if you can't raise your HDL like me? You can always bring your triglycerides down. So, if you bring that triglyceride of I50 down to 80, even with the 40, now you got a ratio of two, you ain't getting a heart attack. So, all you got to do is bring triglycerides down to improve that ratio. Even though one of the numbers is very difficult to move, the other is very easy to move, making a much, much better healthy condition.

SHAWN STEVENSON: Yeah. That puts empowerment back into our hands. I love it, Jonny. So, this brings us to one of the things that I want to have you on today to talk about, because when we hear about these different drugs, and again, there are appropriate places for a lot of these drugs absolutely.

DR. JONNY BOWDEN: Sure.

SHAWN STEVENSON: But again, having this kind of standard of care where we're not addressing the underlying symptoms, we're looking at the potential, of course, with any of these pharmaceuticals for adverse events. And according to the EJS Center For Ethics at Harvard, we've got somewhere in the ballpark of about 3 million Americans are hospitalized each year. And we're talking about majority properly prescribed medications and upwards of somewhere in the ballpark of about 120 to 130,000 Americans dying annually.

DR. JONNY BOWDEN: Yeah. Oh, it used to be 106. Is it up to one 130 now?

SHAWN STEVENSON: Yeah, yeah.

DR. JONNY BOWDEN: This is going down folks, I can say that.

SHAWN STEVENSON: This according again to researchers at Harvard so... And again, we'll put that up for everybody.

DR. JONNY BOWDEN: 130,000 people a year from correctly prescribed, not abused.

SHAWN STEVENSON: Right. We're not talking about...

DR. JONNY BOWDEN: It could be they did exactly what the doctor said on the label.

SHAWN STEVENSON: Yeah, we're not... And we're not also talking about illicit drugs.

DR. JONNY BOWDEN: No.

SHAWN STEVENSON: We're just talking about... Prescribed drugs is stuff that you can get out there that are legally prescribed. And so...

DR. JONNY BOWDEN: And again we're... Neither of us is saying, "We don't want medications to be available." There are some very useful ones. It's usually only like about one in 10 that actually makes it to market that's any good and any better than what came before so a lot of them are blanks. But there are the archaic smallpox vaccine, shingles vaccine. Metformin I mentioned, there are great drugs out there. The vast majority of them come with a list of side effects and if you can, you don't want to reach for them as the very first opportunity. I'll tell you a story from when I was a nutritionist in New York City in Equinox. A very famous Broadway composure came to me, and he brought with him a list of the medications he was on. And this guy walks in, he's about 10 years younger than I am now. And he walks in with a cane. A world-famous composer. If I mentioned one of his things you'd know immediately. Walks in with a

cane. He looks like death warmed over. I looked at this list, it's a yellow pad. He's got this for depression, this for sleep, this for anxiety, this for his gut, this for his GERD, this for his that, this for his Crestor. And I said to him, "Has any doctor ever looked at this list for interactions?" What do you think the answer was?

SHAWN STEVENSON: Absolutely not.

DR. JONNY BOWDEN: Do you think there's any study in the world that's ever looked at that list for interactions?

SHAWN STEVENSON: Absolutely not. Absolutely not.

DR. JONNY BOWDEN: That's why it's good to try to keep that list as short as you can.

SHAWN STEVENSON: You are a walking experiment.

DR. JONNY BOWDEN: Just keep the list... I take some... I take Telmisartan for blood pressure. It's actually an anti-aging drug, it's very good. It's about it. I take 58 supplements a day, but I only take one or two little medications that are very targeted and they're not... And they would take it only after a lot of thought, and looking at the pros and cons, I think Metformin is a great one. They're researching that for its anti-aging properties right now. It's given to diabetics for lowering blood sugar, but it helps with insulin resistance, and it may extend life.

SHAWN STEVENSON: So, this is... Bringing us to this important point which is, this... What can seem on the surface to be a "side effect", is actually a mode of action that a drug is targeting a specific thing generally but it's going to affect your system wide. And so...

DR. JONNY BOWDEN: Collateral damage is a good way to think of it. It never just targets the thing that you wanted to target, there's other consequences.

SHAWN STEVENSON: So, let's talk about this in the context of Statins because there is a reason why it does what it does. So, let's talk about the mechanics, like what is a Statin targeting in our bodies? And also, let's talk about some of the other fallout that happens by it basically addressing one particular enzyme. So does the...

DR. JONNY BOWDEN: So, you asked how do they work, Statin drugs. So, I went back to my original version of the great cholesterol. We took this after the newer edition, and please don't look for the old edition 'cause the new edition explains the importance of insulin resistance. This was technical and kind of not that many people were interested in it like you are. But this is a diagram, I hope they'll be able to get this up there of what's called the mevalonate pathway.

And it's a pathway by which the body makes cholesterol. And if you can't really see it from here, but I'll just read. It starts sort of at the bottom and think of it as a tree and cholesterol is one of the branches. Another branch is coenzyme Q10. One of the most important nutrients for the heart and for the life. What statins do is they poison the root of that.

It like they want to get rid of that branch, so they figure, okay, let's just cut off the trees. So, they basically stop this pathway and all of the things that come through this pathway by blocking an enzyme called HMG-coenzymeA reductase along the thing. And statins are technically called HMG-coenzymeA reductase inhibitors. They inhibit the enzyme that makes cholesterol. The problem is, it's like inhibiting the root of the tree that makes all of the branches because you got all these incredible things that come from that same pathway, like coenzyme Q10, that are now screwed up. And the irony is, the stupid branch that they're trying to get down isn't even dangerous. So not only are they cutting off the whole tree and everything that comes with it, but they're doing it to try to get rid of something that the body desperately needs.

Here's a factoid that a lot of people don't know. The cholesterol in our bodies, 20% or so, comes from the outside world. The other 80% the liver makes, and if you eat less of it, the liver makes more. And if you eat more of it, the liver makes less because the liver wants your body to have this certain amount of cholesterol because as you said earlier in the show, cell membranes in the brain thinking, memory, sexual performance, pain, all of these things are affected and are needed cholesterol, which is why we make it.

SHAWN STEVENSON: Yeah.

DR. JONNY BOWDEN: So, when we're talking about these side effects of drugs where the pharmaceutical companies go in with like the big guns, they go, oh, there's a fly on that wall, let's take a sledge hammer. And they forget that yeah, you're going to get the fly, but you're also going to need a new wall because you just destroyed the structure of your house. And that's what a lot of these drugs do. That's a great example of it. It's basically cutting off a tree that we need in an attempt to get rid of a branch that isn't even bad for us.

SHAWN STEVENSON: Right. Because this is that process of targeting that particular, again this is HMG-CoA.

DR. JONNY BOWDEN: Coenzyme A reductase.

SHAWN STEVENSON: Reductase inhibitors that's going to also inhibit the creation of coenzyme Q10.

DR. JONNY BOWDEN: Which we need desperately. My co-author, the late Steve Sinatra died a few months ago. The great cardiologist who co-wrote both versions of The Great Cholesterol Myth with me. He was a big believer in what he called the awesome foursome. These are four nutrients that every heart... He was a cardiologist. Every single one of his heart disease patients he would have on carnitine, ribose, Coenzyme Q10, I forgot what the fourth one... Magnesium and co enzyme Q10. Those would be awesome foursome. The heart has the most coenzyme Q10 of any organ in the body. Why? Because it's an energy spark plug all the cells need it, but the heart never takes rest, ever. The digestive system takes rest too fast. You give your digestive system a much-needed rest. You can't give your heart a rest. So, it's constantly in need of coenzyme Q10. So, what is the irony of giving a drug to prevent heart disease and the drug itself takes away one of the nutrients that the heart needs the most? How insane is that? Right now, they are... Finally, doctors are saying, well, if you want to stand, you should probably take CoQ10. In fact, this is something we've known for 25 years.

SHAWN STEVENSON: And it's still treating a symptom of something you're creating with a drug. All right, so this leads to... With that target of action with the statin, that also that targeted action is going to inhibit the production of our sex hormones as well.

DR. JONNY BOWDEN: Oh, this is the one that always gets attention, always. So, cholesterol is an apparent molecule. One thing it makes is vitamin D, which we have a nationwide shortage of in terms of in our bloodstream and most people are not at optimal levels of Vitamin D that might be related. But here's what you make from cholesterol, testosterone, progesterone, and estrogen. The sex hormones come from that. Now, as I wrote in the book, I said, maybe it's a coincidence that 40% of American men are on erectile dysfunction medications and stuff. Maybe it could be a coincidence, but it's kind of a suspicious one because you've got a demonstrable effect on testosterone with statin drugs, and I can prove it to you. You have probably heard of PCOS, Polycystic Ovary Syndrome. It affects women. It's painful, it's horrible, it's terrible. And one of the things that happens with polycystic ovary syndrome is that these women make a lot of male hormones, they make a lot of testosterones.

And that leads to a lot of the symptoms they get here on the face, and they get acne, just a lot of things. When you take PCOS women and you put them on statin drugs, guess what happens? Their testosterone drops, which is great thing if you're on PCOS, if you have PCOS, but if it drops it on PCOS, what do you think it does to you and me? It drops testosterone, folks. And that is, that matters to women too, because if you talk to any, and I know you've interviewed a million of them, any anti-aging doctor, testosterone's part of hormone replacement therapy for women. It affects their energy, their fat burning, their libido, their mental clarity, all those things are affected by that. They have much less of it, but they need some of it too. And you don't want that dropping as a side effect of statin drugs.

SHAWN STEVENSON: Yeah, I mean.

DR. JONNY BOWDEN: Especially if you don't need them in the first place.

SHAWN STEVENSON: Let's just be clear with the... We're just, again, we're talking about different areas, but this is not something that's innocuous. We need to get this education out in a big way. I'm so grateful for you. You've been beating this drum for so long but now moments like this is where you get to the stepping point. And I want to mention this too because again, in that pathway, this issue that I'm about to note is on the rise in such a big way. And if we're talking about longevity, we need to address this. So, researchers at Emory University School of Medicine, this title of this study will put up for everybody, Statin induced myopathy, a review and update, and we're seeing clinically about a 15% uptick in myopathy, so we're talking about degradation of our muscle and muscle function by individuals who are utilizing statins. So, statin-related muscle side effects and muscle-centric medicine is like this huge force, if we're talking about longevity. And we had Dr. Gabrielle Lyon for example, who's really pioneering this space. When we start to lose muscle and lose muscle function, you're punching an express ticket for early death and degradation.

DR. JONNY BOWDEN: There's a name for it, it's called Sarcopenia, and it's a loss of muscle with age. It's use it or lose it, it's very simple. It's not hard to explain. You don't need a lot of biochemistry; it's use it or lose it. What happens to your muscles if you don't exercise them, about a half a pound is that... You would know better than I think it's a half a pound a year of muscle that you lose if there's just nothing done to preserve it.

SHAWN STEVENSON: If you're not doing anything.

DR. JONNY BOWDEN: If you're not doing anything, so you got to fight that.

SHAWN STEVENSON: Yeah, it's something to kick into gear even more so as you get older. Also being, aware that certain lifestyle factors can... Even if you're strength training and doing all the things, if you're on a statin, you're increasing your risk of losing your muscle function and this is not a joke. It's one of the things that the statin does. It's in that mode of action, as we've been talking about, it's one of the tree branches that's getting basically blocked from being able to grow.

DR. JONNY BOWDEN: Get into something else that I know you wanted to talk about it to bring it all together, the mechanism by which it does that. It's the statins harm the mitochondria, and I know that was something you want to talk about, so let's tell people what that connection is. So the mitochondria are these little, they're called organelles, they're tiny, you can't see them, they're in a cell, which you can't see 'cause it's so small, but there are tiny little energy

factories in the cells that are responsible, A, for energy production, meaning that they actually make Adenosine triphosphate, which is the molecule that your cells use for everything from blinking your eyes to dancing the mambo. It makes cellular energy, the mitochondria detoxify you, and the mitochondria burn fat. Three very nice things that you don't want screwed up, and statin drugs harm the mitochondria. And there are doctors in functional medicine who believe not without cause, that all disease at its core is some kind of mitochondrial dysfunction. 'Cause if those little guys are not producing energy, you're going to be fatigued, you're going to be tired, if they're not burning fat, you're going to be overweight and if they're not detoxifying, you're going to have toxins and build up and stuff with the liver. The health of the mitochondria is a stand-in for the health of your body and your longevity and statins harm them.

SHAWN STEVENSON: Wow, I love that you mentioned this...

DR. JONNY BOWDEN: I thought you're going to ask me how, and that's what my show and tell was. But it's so complicated that it's not even funny, but I could read you four seconds of it. The point is that they do harm the Mitochondria.

SHAWN STEVENSON: You got to read it. You know show and tell was like the best part of school.

DR. JONNY BOWDEN: I thought you ask why. And by the way, what I did is I went to Google, which anybody can do and ask statins and mitochondria. Studies like this come up, statins, muscle disease and mitochondria, the effects of statins on mitochondrial pathways, this is not made up stuff, but here's the mechanism, and this is why I don't think we should talk about it because it's... Emerging evidence suggests that statins impair mitochondria, that's all really anybody has to remember, but if you really want to know how they do it, it's demonstrated by abnormal mitochondrial morphology, increased oxidative phosphorylation capacity in yield, decreased mitochondrial membrane potential and activation of intrinsic Apoptotic pathways. It's over my head. It's over most people's head, but what's not over any of our heads is that it does these things, and it harms these important structures in our cells that are responsible for many of the things that give us life and vitality. Fat burning, your metabolism, your detoxification, the making of your energy and they are being harmed, and that's why people feel muscle pain.

SHAWN STEVENSON: Yeah, so powerful. Thank you so much, Jonny. If we extrapolate this and go... We can go down so many different...

DR. JONNY BOWDEN: Oh, we could indeed.

SHAWN STEVENSON: Parts with this story because if it really... You mentioned this, the mitochondria being an end point, when we talk about this term of burning fat, this is where the magic happens.

DR. JONNY BOWDEN: That's what happens. That's where it's done.

SHAWN STEVENSON: Cellular respiration...

DR. JONNY BOWDEN: You can see it under a microscope.

SHAWN STEVENSON: Beta oxidation, this is the end point.

DR. JONNY BOWDEN: Beta oxidation.

SHAWN STEVENSON: So, when we're damaging...

DR. JONNY BOWDEN: In the mitochondria, that's where it happens.

SHAWN STEVENSON: There you go. So, we're going to see... We can go down the pathway of excess body fat with statin use, with the inability to lose weight or struggles there, more of this is going to be coming out in future months, future years, but you can get ahead of the curve. Get yourself educated. Take your power back. Understand is this necessary for you? And if you're working with a physician who doesn't have the same goal as you, you have the right to get another physician, and of course, I'm just coming into an understanding, there's a certain structure in place where a lot of folks, they're looking out for themselves and their business so that they can be of service. And often times, because of the way insurance is structured would... I didn't know we were going to talk about that today. Sometimes, it's going to be outside the paradigm of their ability to serve in the context that you might want, but by us demanding better and by us being more proactive, maybe we create a little fund where we have the ability to pay an out-of-pocket blood test panel, so we can get better numbers. There are so many different ways that we can accomplish this goal, but most importantly it's the education, you're such a huge force in this. I just want to thank you so much for being who you are.

DR. JONNY BOWDEN: My pleasure this time flew by. That's great.

SHAWN STEVENSON: As it usually does.

DR. JONNY BOWDEN: It is awesome. Thank you so much my friend.

SHAWN STEVENSON: Can you let everybody know where they can connect with you more, follow you, your website, all that good stuff.

DR. JONNY BOWDEN: My website is jonnybowden.com, J-O-N-N-Y no H in Jonny. I have a free course on intermittent fasting that's right there that we just put up on introduction to what you need to know very easy and it's free. Just go and get it. And on Instagram and all that stuff is @JonnyBowden, just remember, no H in Jonny.

SHAWN STEVENSON: Awesome, the right way. The cool way, you're such a cool human being.

DR. JONNY BOWDEN: So are you.

SHAWN STEVENSON: Brilliant, and I appreciate you so much.

DR. JONNY BOWDEN: Thank you.

SHAWN STEVENSON: Dr. Jonny Bowden everybody. Thank you so very much for tuning in to the show today. I hope you got a lot of value out of this. It's Such an important conversation. This needs to be shared. Again, statins are in multiple. Statins are in the top 10 most prescribed drugs in the United States still to this day, even after all of this data has been coming out and the appropriate use of statins has been superseded in so many different ways. And most folks simply just don't have this education around where the value add can potentially be and also the tremendous list of side effects. And this is one of those situations where the medication itself is not innocuous and we need to have proper education. It has a place, but it's been relied on so much it's been passed out like candy, automated to where somebody has a high LDL number without any context, "Oh, you're put on a statin." And so again, this education is so important, please share this out with your friends and family. You can share this up on social media. Take a screenshot of the episode, tag me and tag Jonny as well. Tag Dr. Bowden, he would love to see that. Extend him some love. He's such a special person, and I was so grateful that we get time to be with him right now on the planet. He's been here for a long time. My man's in his 70s and he is, I'm telling you, you cannot hold him down, he's bouncing around the room. Such an example of what's possible by focusing on real health and wellness.

And he's such a great teacher living by example, but I just really want to give him his flowers and please take a screenshot, tag him. Share some love, infuse him, energize him with some love. And also, of course, you can send this directly from the podcast app that you're listening on. This is an episode that crosses demographics and can resonate with folks who are in their elderly years as well, coming from somebody the voice of his generation. So again, keep that in mind too. So, it can always be valuable hearing things from a different perspective.

I appreciate you so much for tuning into the show today. We've got some epic shows coming your way very, very soon. So, make sure to stay tuned. Take care. Have an amazing day, and I'll talk with you soon. And for more after the 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.