

THE MODEL HEALTH SHOW

EPISODE 510

**5 Risk Factors For Covid That
You're Probably Not Hearing
About**

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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. Obviously, we're dealing with an incredibly complex health issue right now in our world, and there's a lot of things that are being overlooked. And it's really important for us to just take a very logical assessment at all the things that have happened thus far, and has any particular thing been effective, has any particular mandate or any particular pharmaceutical intervention, has it truly been effective and a sustainable solution? And so today we're going to really shine the light on some of the biggest risk factors or severe outcomes from COVID-19 that you probably are not hearing about. In fact, we're going to dive into five really interesting risk factors for COVID that you're definitely not hearing about. And the first one that we're going to kick things off with is related to a major risk factor for severe effects from COVID-19, and it's something called polypharmacy.

Now, polypharmacy is the simultaneous use of multiple drugs by a single patient for one or more conditions. Polypharmacy. Now, to give you context as to why these matters in relationship to COVID-19, about 70% of United States citizens are already on drugs, clear pharmaceutical drugs, legal drugs. In fact, the United States has the highest rate of pharmaceutical drug use in the entire world, we are the leader in that category. Now, with that, and wondering why are we such a drugged culture, we also have to understand and take a good look at the fact that we're also the sickest nation, really not just in the world, but in the history of humanity. Specifically, if we're talking about self-inflicted diseases, lifestyle-related chronic diseases, we are the sickest nation in the history of the world with currently, right now, here in the United States, we have about 242 million of our citizens are clinically obese or overweight, 242 million.

We have about 115 million of our citizens who are regularly sleep deprived. And we know how much of a role sleep plays into the equation of overall health, body composition, cognitive performance, and also infectious diseases, as well. We've got about 130 million of our citizens have diabetes, type 2 diabetes, or pre-diabetes. It's at an epidemic proportion as well, about 60% of our citizens already have some degree of heart disease right now, we're a ticking time bomb. And right now we have about 25 to upwards of 50 million of our citizens have an autoimmune condition. And I could just keep going on and on and on and on, we are a very, very sick society, and these things aren't getting any type of press right now, it is just pushed to the back burner, and they're not being acknowledged.

But because of our reliance on pharmaceutical medications in the treatment of symptoms for this disease, not removing these diseases and the causes of the diseases, but the treatment of

the symptoms is actually leading to far worse health outcomes from COVID-19. A study published in BMC Medicine, peer-reviewed journal, investigated the relationship between severe COVID infections and being on pharmaceutical drugs prior to contracting the infection. After analyzing the data of thousands of patients, the researchers uncovered that "severe COVID-19 was strongly associated with the number of drug classes dispensed."

Outside of cardiovascular drugs, the researchers found that the more classes of drugs people were on, the greater their risk of severe COVID infections. Now, this should be, again, something that's really eye-opening, the more pharmaceutical drugs somebody's on, the worse outcomes they're going to have if they are infected with COVID-19. So, are we addressing this issue, are we looking at are we on appropriate medications, what are the underlying conditions for the medications, because it's creating a much, much higher risk factor?

Now, the researchers also indicated that some of the worst effects for COVID were seen in people who were on antipsychotic medications, and this was leading the list, proton pump inhibitors and opioids. So, what I want to do is investigate a little bit further, why would these particular categories of drugs have these type of effects when we're talking about infectious diseases, namely COVID-19.

Well, the antipsychotic drugs that were apparent as being the worst offender, why would this be leading to worse health outcomes from COVID-19 infections? Well, antipsychotic drugs have an influence on our hormones, neurotransmitters and neuropeptides that have a dramatic influence over cellular communication. And neuroscientist Dr. Candace Pert, the person who discovered the opiate receptor, by the way, so she knows a thing or 10,000 about this subject matter, she said that, "Viruses use the same receptors as neuropeptides to enter into the cell, and depending on how much of the natural peptide for a particular receptor is around and available to bind, the virus that fits that receptor will have an easier or a harder time getting into the cell, because," she states, "the molecules of emotion, which we were talking about again, these neuropeptides, neurotransmitters, "are involved in the process of a virus entering the cell. It's logical to assume that the state of our emotions will affect whether or not we succumb to viral infections," as she goes on further.

And so just to extrapolate this a little bit again, we're looking at the pathway that viruses use to enter into the cell being involved with our neurotransmitters, neuropeptides, and even this, our hormones as well, the cellular communication channel, because they're really these glorified messengers sending these metabolic DMs and immune system DMs throughout our entire system, whether it's in regards to our endocrine system, our nervous system, which are regulators of our immune system as well. And so being on drugs that inhibit or influence or disrupt or create abnormal communication with our neuropeptides and our

neurotransmitters, this could potentially, as the data might be indicating, lead to a higher risk of infection from COVID-19, from SARS-CoV-2, being able to enter the cells and replicate. Really, really interesting stuff there. So, is this getting talked about? Are you seeing the headlines on this one? Probably not.

Proton pump inhibitors, so these are involved in gastrointestinal distress, so acid reflux and other things along those lines in that category. But proton pump inhibitors are some of the hottest drugs on the street as well. And the researchers state, "As SARS-CoV-2 is at least partly an enteric infection..." SARS-CoV-2 is at least partly an enteric infection. What that means is something involving the gastrointestinal tract, which again, you're probably not hearing about COVID-19 being at least partly an enteric infection. They go on to state that, "And the ACE2 receptor is expressed in the intestine," so that's the channel that SARS-CoV-2 is using to make its way into the cell, "it is plausible that proton pump inhibitors and other drugs acting on the gastrointestinal track could increase susceptibility to severe COVID-19."

What about drug interactions? How is the new vaccine campaign...? How does that interact with proton pump inhibitors? Is there any interaction there? Cardiovascular medications, antipsychotic drugs. How does this all fit together? Because it all fits together, anything that we bring into our body that's affecting our cellular function, things could go wrong. And these things are not really being analyzed, and so I really wanted to highlight this and bring this to our attention to provide another level of empowerment and things that we can look towards because the goal is to not be on all of these medications that, again, they treat symptoms, they're not removing the cause of the gastrointestinal distress, they're not removing the cause of the anxiety, they're treating a symptom, often times suppressing the symptom, which is the body's feedback, it's giving us an alarm. For example, if we're experiencing gastrointestinal distress, it's giving us feedback that something is wrong, something is off with our internal environment. It might be something from the external environment that's causing this issue. And if we don't remove the cause, we're going to continue to have the symptom.

What happens when you mute the symptom, does the body's feedback just disappear and go away, or is it going to manifest in another way, in a stronger way, another disease signal that you have to take care of this issue? It might be some type of toxin exposure; it might be some type of... In the case of anxiety, it might be related to sleep deprivation, or it might be related to excessive stress, or whatever the case might be, and our biology is giving us feedback that we need to change. But instead, we take a drug to suppress the symptom and wonder why it's not working, wonder why we're not getting better as a society. So, to take this another step further in this context with proton pump inhibitors being a risk factor, an increased risk factor, a high-risk factor for severe effects from SARS-CoV-2, another recent paper... Because again, proton pump inhibitors are targeting the gastrointestinal track.

Another recent paper, and this one was published in the journal, Gut, it's all about the gut, getting up in them guts. So, this was published the journal, Gut, and is titled, "Gut microbiota composition reflects disease severity and dysfunctional immune responses in patients with COVID-19." The researchers uncovered that hospitalized COVID-19 patients consistently had lower levels of immunomodulatory bacteria coinciding with higher levels of inflammation. We know that Hippocrates said this, "All disease begins in the gut." "Forget Hippocrates, father of modern medicine, Hippocratic oath, forget it, doesn't apply." We've got data now affirming, which, this makes sense because the majority of our immune system is located in our gut. We've got data on this for years now, mountains of evidence on this, but now we have new data affirming how SARS-CoV-2 is at least in part, an enteric infection affecting our gastrointestinal track.

Now, in this study, we don't know if folks already have gastrointestinal distress, gut dysbiosis coming into it, making them more susceptible, or if SARS-CoV-2 is creating the disruption to the gastrointestinal track. It's probably the former, it's probably the fact that the gut dysbiosis, the gastrointestinal distress, whether it's conscious or unconscious, within the individual is leading the way or creating the susceptibility for SARS-CoV-2 infection. Alright, so this is the reason why proton pump inhibitors are found to be one of the leading agents creating a susceptibility to SARS-CoV-2 infections that you're not hearing about, but you heard it here. You're hearing it today.

What about the other class? The other one is opioids. So, opioid use has been found to be one of the things that create an extra layer of susceptibility to COVID-19. A report cited by the NIH, the National Institutes of Health, they're getting a lot of press today, they're supposed to be the organization we're looking to. A report cited by the NIH stated that hospital patients who received a diagnosis of opioid use disorder within the past year were over 10 times more likely to have a COVID-19 infection than patients who didn't have a diagnosed opioid disorder. 10 times. Not two times, not four, 10 times. This is how serious this is. And these opioids, it just continues... There's so much litigation happening right now, we know the detrimental effects, by the way, you got to check out Crime of the Century. It's a film on HBO, Crime of the Century, really breaking down and looking at this massive issue with opioids and the pharmaceutical companies that purposefully drove this epidemic of death, countless deaths and lives destroyed.

And again, just check out that film, I'm not going to spend too much time on it, but I just wanted to share, one aspect of it is that one of the companies, the pharmaceutical companies leading the charge in the vaccine campaign, Johnson and Johnson, they're actually... Johnson and Johnson, a little fun fact about them, they are also the world's largest producer of genetically modified super poppy, they called it super poppy. Genetically modified narcotics that are used to make highly addictive opioids. They're the world's largest producer of

narcotics used to make opioids. They're making billions of dollars on both sides of the equation, creating susceptibility and they got a treatment for you as well.

Now, currently, Johnson & Johnson's been ordered to pay a multi-billion dollar fine for their unlawful contribution to the opioid epidemic, they've been caught. But is that going to stop the big machine from rolling? Absolutely not, absolutely not. Until we demand that these organizations that are committing repeated... Literally, they've killed people intentionally. They knew that these drugs weren't safe, and yet they're just able to operate business as usual. Matter of fact, they put out a new multi-billion-dollar vaccine as if the company is really operating from an ethical place, and we know that that's not true. Not to say that they're all bad but man... The bad that they are is pretty bad, it's pretty bad. So, this is just one of the biggest risk factors for COVID-19 that you're probably not hearing about, polypharmacy. The more pharmaceutical drugs you're on, the higher your risk of severe outcomes from COVID-9. And it all ties together with, again, the underlying reason why we're on the drugs in the first place, and also the drugs themselves.

Now, the question also in regard to the next one of these risk factors is understanding why there's such an epidemic of folks being on opioids and being on antipsychotic medications, being on anti-anxiety medications. Well, one of the ways that people deal with these epidemic levels of anxiety and of fear is through drug use. And overall, a lot of folks don't realize this, but I want to share this with you, it's very, very heartbreaking. Overall drug overdose deaths in 2020 hit the highest number ever recorded, but it's as if experts didn't see this coming. This is well-known that this... Well-established, an outcome like this is very, very likely to happen because of the way that we handled this, we were... It's just like collateral damage for children to be pulled out of school and especially low-income households falling so far behind.

It's going to be next to impossible in some instances for these kids to catch up again. Not even having access to online education, even the levels of that, the barriers that that puts in place with learning, with education and with social development, the development of the social and emotional aspects of the human brain that are critical, especially in those early years of life, what is the long-term ramification? Are we going to see a nation of children who grow up to be on more psychoactive medications, legal and illegal? Higher rates of ADHD, higher rates of drug abuse, alcohol abuse, higher rates of depression and suicide, higher rates of fill-in the blank, food addictions.

Higher rates of heart disease, the list goes on and on and on. We don't know, it's been this massive social experiment and not really taking into consideration the people who are the most susceptible. And I say that because they're the ones who depend on us the most to do the right thing for them. So, seeing that this has played out, which I talked about this when this all started, when it all kicked off, you want to go back in my catalog, I was saying, "Listen,

if we're doing these things, this is going to happen." One of those things is a rampant increase in overdose deaths and in suicide. But the thing is, if we stand firm right now, we can put an end to all this and we can start to heal our communities, heal our relationships, heal our bodies and our minds, and turn this whole thing around.

But right now, we're still in that same train leading nowhere, it's that same principle, Albert Einstein, doing something again and again, expecting a different result. We're looking for some drug to save us, we're looking for some pharmaceutical intervention to come along like this is a movie, that's going to fix all this stuff, and that's not how reality works. This isn't a movie. So, leaning into this, this brings us to the second of these really shocking risk factors for COVID-19 that you're probably not hearing about. And this one is one that we did a masterclass on, but still, I want to make sure, package it into each episode, we're providing these, for some folks this might be the first episode that they ever hear. And so, I want to make sure that people hear this because it's such a powerful insight.

The CDC recently did a big analysis tracking COVID-19 hospitalizations and severe illness from over 800 US hospitals, massive data set, including over 540,000 US citizens over the course of a year to analyze their risk factors for hospitalization and for death. And what they discovered after analyzing the records, actually looking at the data, is that the strongest risk factor for death from COVID-19, number one was obesity. Now, we can just do the entire presentation on that one factor alone and we will. Why is that? Why is this actually happening? But we know this connection. Are we doing anything about it? Of course not.

The number one risk factor, we're doing nothing about it. Your favorite public health officials saying nothing about it, doing nothing about it. Your favorite media channel doing nothing about it. Is that an accident? The number one risk factor not getting a mention. At me, at obesity, not getting a little bit of shine. The number one risk factor. "We got a drug coming, don't worry about it." That's the number one risk factor. But the risk factor that most people are not hearing about is the second leading risk factor for death in this massive analysis, again, published by the CDC. The second leading risk factor for death from COVID-19 is anxiety and fear-related disorders.

Anxiety and fear-related disorders is the second leading risk factor for death from COVID-19. And immediately this should put up a massive, a massive red flag and a massive thought bubble should pop up and the inquiry should start, like, "Why? How? That sounds outrageous." Anxiety and fear being the second leading risk factor for death from COVID-19. 540,000 patients, data studied, 800 US hospitals, CDC published study, why isn't anybody talking about this? But again, the question should be why? Why is this happening? Well, this leads into another study, this was published in the peer-reviewed journal, Brain, Behavior and Immunity, and it

investigated the dynamics of psychoneuroimmunology in COVID-19. So, psychoneuroimmunology.

So, essentially looking at how our psychology, our minds influence our immune system performance. And this goes back to this foundational tenet that I always want you to live with, to have reverberating in your life from The Model Health Show ever more, forever, forever, forever, shout-out to the Sandlot. But it's this important tenet, which is a factor of life that every person should know, is that your thoughts create chemistry in your body. Every thought that you think creates correlating chemistry in your body, your thoughts change your biochemistry instantly, whether that thought is affirmative and something that is based on excitement, joy, love, peace, is what we tribute to be these positive qualities, or things like fear, anger, depression, worry, anxiety, these things that we relate and put in the category of negative emotions.

But in truth, all of our emotions have value, we just label them as such, they're all giving us feedback, they're all giving us feedback. We have these basic tenets of moving towards pleasure and away from pain, and these are our guidance, our emotions are these brilliant feedback mechanisms. So, our thoughts can create that chemistry, whether it's based on something factual, or something totally made up, that's the rub. So, we can be thinking fearful thoughts that aren't based on anything that is a truly imminent threat in our lives. We can imagine that this terrible thing is about to happen and change our biochemistry to the degree that we can suppress our immune function dramatically, increase inflammation in our bodies, as I'm going to share with you, and radically increase our susceptibility to all manner of infections based on our thoughts, not even based on something real and tangible. Just based on our perception of reality.

And your perception of reality is your reality, your perception about reality is your reality. And so, the researchers, again, this was published in Brain, Behavior and Immunity, investigated the dynamics of psychoneuroimmunology in COVID-19. And some of the key points that the researchers revealed are there's a substantial unanticipated impact of COVID-19 on the psychological health of both the general community and affected individuals. They also indicated that the fear of COVID-19... The fear of COVID-19 and the consequent lockdown and economic crisis has led to globally increased psychological distress. They also noted that activated immune inflammatory pathways, especially chronic low-grade inflammation, chronic low-grade inflammation are associated with major psychiatric disorders.

And COVID-19 infections activate immune inflammatory pathways as well, as such, psychological stress appears to increase the severe reactions to COVID-19 infections. Again, psychological stress appears to increase severe reactions to COVID-19 infections, and COVID-19 infections appear to exacerbate psychological distress. They go together, they're Shaq and

Kobe, Jordan and Pippen, Batman and Robin, Ike, and Tina. You name it, whatever duo, Sonny and Cher. They go together, the psychological distress and the increased incidence of infection and the infection and psychological stress. And that psychological distress is not merely a result of the infection itself, it is the fear surrounding the infection because truly, truly millions upon millions upon millions of people who didn't know that COVID-19 existed, if it didn't have this powerful system of mass media and marketing around it, used to describe something... That the term itself is just... It's laced with fear.

Very similar in the same vein as cancer, but more so in a sense. More so in a sense, because it's new, so there's a lot more uncertainty around it. So, being that the term COVID-19, the idea of it is laced with fear and death without context, without the fact that over 99% of folks who are infected with this particular virus, they live, the vast majority of folks having only mild symptoms from it... So, not to say that this is not a virulent and deadly condition, but it's without context, it's just... For many people, they already see it as a death sentence because it's been so inundated with death around it, because that's all they see.

And we share this multiple times here on The Model Health Show, when CNN Technical Director Charlie Chester was caught saying that they put up the death toll ticker to keep people in fear and keep them inundated with fear to keep the ratings up. And when asked why they don't put up a recovery ticker, like all the good things that are happening, the people that are okay, that are recovering. He thought about it for a moment, and then he said that that's not scary. That's not scary. Why would they do that? If it bleeds, it leads. He says the words. These are the things that we know. We know that this is going on if we have some modicum of sovereignty and not outsourcing our thinking to the news, which unfortunately even as our trust in the news has gone down, people are watching the news more than ever. Isn't that interesting?

But just in the event that someone is listening to this episode, this show for the first time, I can't just say this stuff and have it come from me, unfortunately. Sometimes that's not enough, when you say something that is so nefarious... That a major news network that has the attention of millions upon millions upon millions of our citizens and their education, they wouldn't be so seductive and nefarious and try to control people with fear, would they? So, we're going to put Charlie Chester, so you can hear from the CNN Technical Director, step below the director, hear from him on him purposefully, their network purposefully using fear to control people, and please understand every major news network is doing the same thing. Let's hear from him.

Charlie Chester: COVID? Gangbusters with ratings, right? Which is why we constantly have the death toll on the side, which I have a major problem with how we're tallying how many people die every day. Because I've even looked at it and be like, look at it and be like, "Let's make it

higher." Like, "Why isn't higher enough, you know, today?" Like it would make our point better if it was higher. And I'm like, "What I'm I f**king rallying for?" That's a problem, that we're doing that, you know.

Speaker 3: Why don't you guys at CNN show the recovery rates on the death tolls, at least?

Charlie Chester: Recovery rates... Oh, who's had it and then...

Speaker 3: Recovered.

Charlie Chester: Recovered. Because that's not scary, that... I would imagine that's why they don't do it, yeah.

Speaker 3: That's what I figured.

Charlie Chester: If it bleeds, it leads. Yeah.

Speaker 3: If it bleeds, it leads?

Charlie Chester: Yeah.

Speaker 3: I like that.

Charlie Chester: I think, no one ever says those things out loud, but it's obvious based on the amount of stories that we do. Like, the fact that we have a segment called The Good Stuff, which is a feel good thing, but it's a dedicated moment at the end to like, almost like be the ice cream to alleviate everything that you've been through, like something sweet to end it with, because everything else is like doom and gloom.

Charlie Chester: And the only people that we will let on the air, for the most part, are people that have proven track record of taking the bait. I think there's like an art to manipulation, I think a lot of... I think some people have figured it out inherently...

Speaker 3: Like with the media or just like in general?

Charlie Chester: Media and in just conversation.

SHAWN STEVENSON: Again, all major news networks are utilizing these same tactics to control what we're thinking, to control the narrative. Not to educate, not to empower, but to inundating to control people with fear. And often, again, fear without context. The vast

majority, 90% negative, and a little feel-good story, as he mentioned, a little feel good, The Good Stuff, which is like a little bit of ice cream at the end of the suffering just to alleviate the pain a little bit, right before we hit you with more and more and more and more. It's unethical, it's wrong, but yet, our government bodies aren't doing anything about it because they are helping to run and regulate all this stuff, they're influencing each other and getting rich off of our collective ignorance, getting rich off of our collective low level and absolutely demolished societal level of health.

Because if you take a peek back, again, all major news networks are doing this, we've got to really be honest about this, because we might have our favorite news network, but they're all funded by the same people. The truth is at our major news networks are paid billions of dollars every year by pharmaceutical companies, billions every year funding the company itself, do you think they're going to put anything on their news channel to highlight the wrong that these pharmaceutical companies are doing? When is the last time you seen it? 'Cause it's happening. The pharmaceutical... And we're just... This is just the tiny bit of times that they get caught because they are the most powerful legal teams on earth who are keeping stuff, like they got people who are coming in who are the fixers, keeping stuff off the books. You don't hear about it.

And in fact, of course, during the commercial breaks, you're seeing more of the pharmaceutical drug ads. This stuff is not allowed in many other developed countries, to sell drugs on television, to tell you what drug you need. What? This is like the movie, Pineapple Express. You know the guy like, he's well versed, he's got the advertisement, all the different types of, you know, that product... Shout-out to Pineapple Express. If you haven't seen it, don't see it, it's not like some award-winning whatever, but it is definitely... It's an interesting movie to see. Seth Rogen. Shout-out to Seth Rogen.

But the truth is being able to advertise directly to our uneducated, unsuspecting citizens selling them drugs through that medium when they're already in a heightened state of fear by watching the news, and then you add to that, interlaced within the drug commercials, we've got big food, we've got processed food manufacturers, fast food companies, again, spending billions of dollars, billions of dollars every year advertising through major media.

Do you think you're going to see... And listen, we just, we've got to be honest about this. On the news itself, are they going to say bad things about the people that are paying their bills? Conflict of interest. And then even deeper... Since we're swimming, let's go into the deep. Might as well, alright? Now, if you actually take a peek at this, and I'm going to ask you a question, what does FOX, CNN, NBC News, ABC News, CBS News, and MSNBC all have in common? The biggest shareholder in all of those networks is one of the most powerful financial organizations on the earth. The Vanguard Group is a controlling shareholder, a large

shareholder in each and every one of those networks, and also BlackRock Fund Advisors also is there within that kind of top three with all of them.

And so even though they might seem like conflicting news sources, they're all funded by the same people, and the shareholders are the same people for all of the networks. So, we got to wake up to this, because the underlying tenet, the underlying driving force of the organization is to maximize shareholder value. Lots of people have heard that sentiment, and that has a lot to do with it. So again, if we're looking at... They might seem to have these opposing views, but they're still just looking at making sure that the shareholders are happy. So, this is why you will rarely see a narrative-disrupting message come across your favorite news channel that goes against the narrative of the network. You will very rarely see that. And that is very intentional, very purposeful.

As Charlie Chester mentioned, they're getting people on who are well established to "take the bait", to answer the questions how they want them to be answered, and to stay in that pocket. And if for some reason, in that tiny fraction of a percent, that they have somebody on who doesn't fit into that pre-disseminated narrative, there are people who they bring on strictly to ridicule, and to use all of these very intentional means of making that person and their disruptive perspective to look foolish.

So, I don't know if you've noticed that before, but this is a consistent tenet as well. So, I wanted to bring this up and to really dive into this deeper, because the fear that's being just... The fear is viral. It's gone viral in our society. It is the most intrusive, far-reaching virus that the world has ever seen. We are imprisoned by it, and we don't realize how powerful it is. Literally, the second leading risk factor for death from COVID-19 is anxiety and fear-related disorders. So obviously, this can be pre-existing conditions, but this is exacerbated by the fear surrounding this virus, and is being propagated by the media, by the so-called health officials who are supposed to be educating and empowering citizens.

All they do is talk about fear and more things to be afraid of, and how you are incapable of surviving unless you follow their superficial advice on what health is, "Forget the fact that the number one risk factor for death from COVID is obesity. Forget it. Here's this superficial thing, that has not worked, by the way. We're not going to address the actual underlying issue." That's just how they roll. They ridin' dirty. Shout-out to Chamillionaire.

Alright, so if we look at what's happening here with our biology as well, why is fear such a strong risk factor for death from COVID-19? This has to do with very simple biological programming that we have, these kind of cortisol-driven fear responses that take place when we are in a state of fear. So, we get that message of fear from this external environment, we don't have any level of self-mastery and inability to take a meta-perspective, inability to be

logical and analyze, and question, simply question what you're being told to believe. If we don't have these skill sets readily available, then cortisol is getting activated.

That sympathetic fight or flight nervous system is getting activated, because your brain in biology does not know the difference of whether or not you have a real imminent threat, you know, there's an attacker on the prowl, whether that's a fellow human, or a saber-tooth tiger, if you go into that evolutionary example, or if it's imagined. You can activate the same biochemical pathways and processes in the body just based off of your perception of that fear, or whether it's an invisible virus, something that is... Something that you can't see coming for you, which what's scarier than that?

So, keeping that in the mind, the sympathetic nervous system, the immune system becomes a very, very low rung of importance, because it's pulling your circulation to really put you in a state where you can fight or flee, but we're not even doing that. We're not doing through our evolution or even animals in the wild now, where they have their fight or flee moment, then they shake it off. They Taylor Swift it. They shake it off and get back to living. We sit. We got the fear, the fear activation, and that cortisol-driven fear response, sympathetic nervous system, and we just sit in there in that chemical soup, and it creates this, as the researchers mentioned, this chronic, low-grade inflammation.

And we know that COVID-19 is a pro-inflammatory causing disease. It has a tropism towards our endothelium, and specifically our lung tissue, that's where it's targeting, but we are ready, we're... This is hitting a already pre-existing state of inflammation. Pre-inflamed individual? Oh man, like it's dance time. COVID is about to go to prom. Did you say that? COVID is about to go to prom, alright? And my little son, Braden, is actually here in the studio with us, and he shared that little nugget. Come over here, Braden. Come on. Alright, can you let everybody know what is one thing that you've been doing lately to keep yourself healthy with all that's going on in the world?

BRADEN STEVENSON: Well, I keep my mind sharp, now I'm going to... Now I'm starting to go outside again, finally, after playing with my games a lot, all those kids out there.

SHAWN STEVENSON: It's a good job B. Wait, wait, don't go anywhere yet. You also, you've been working out with me and also doing your own workout, so what new thing have you added to your workout recently?

BRADEN STEVENSON: What new thing?

SHAWN STEVENSON: Like you got the band on the bar. What exercise do you do on that?

BRADEN STEVENSON: I do pull-ups. I also use that to stretch sometimes, and also, I do just regular weights. You know, pump-it up, pump-it up.

SHAWN STEVENSON: Awesome buddy. I appreciate you. Thank you so much for sharing your voice okay. Alright, so that was a special surprise guest popping in here. So obviously, again, even having him here, it's... Today, it's one of those underlying tenets, we've got to take care of ourselves as a primary mandate. We've got to be stronger and have our minds and body stronger than ever in order to endure what the world is facing and to be leaders, but also, we've got to... From that step, then it goes to our family. Our family, making sure that that unit is strong and, again, able to endure and to thrive during this time. And we get to create the culture that we want within our own household, and it's such a gift. And so again, special guest jumping in here, thank you, little buddy.

And this goes back to, again, if COVID is finding itself meeting up with an individual who has a pre-inflamed state in their bodies already, and that's another issue with obesity, that, again, we'll talk about in a future episode, we'll really do a masterclass on it, but the inflammation that's going on with the fat cells themselves, and essentially the fat cells sending out a false distress signal and making the body think that you're infected already. I highlight this in my latest book, Eat Smart. I really detail that process.

And so, when COVID interacts with a condition like that, it's a dance battle about to go down. It's about to be an infectious disease version of Step Up. Alright, shout-out to Step Up, one, two, three, four, five, six, I think they're all like 10 of the Step Ups. I think in the original, was it Channing Tatum in there, maybe? And shout out to Bring It On as well. COVID's about to do its dance routine, so this is another reason that we've got to really, again, focus on the underlying issues to decrease our susceptibility, make our families, ourselves and our community stronger.

Alright, now we're going to move on to the third one of our five major risk factors for COVID-19 that you're probably not hearing about. The third one is sedentary behavior. Sedentary behavior is really emerging as one of the biggest risk factors for COVID-19. Even beyond having a pre-existing chronic disease, even beyond being in a state of obesity, simply having an active lifestyle provides a level of protection that is really remarkable indicated in the data, but when we don't have that, our risk factors really start to skyrocket. And this is highlighted in several studies and one of them, the first one we're going to target is a study conducted by researchers at Kaiser Permanente Medical Center here in California.

And they tracked the exercise habits of nearly 50,000 COVID-19 patients and revealed some eye-opening evidence. After analyzing the exercise habits of these participants over the two years prior to the pandemic, it was revealed that people who were consistently inactive were

two and a half times more likely to die from COVID-19, than people who consistently exercised. Alright, this is... Again, there should be a leading intervention to talk about this. This is coming... Instead of a pre-inflamed state, we're in a pre-conditioned, a pre-healthier state, metabolically healthy, an active state, providing this level of protection.

Now, this is such a massive difference that it can be hard to comprehend because to put it another way, what the research indicate is that after advanced age and having a previous organ transplant, lack of exercise was the biggest risk factor for COVID-19 death identified in this study more so than obesity, hypertension, cancer, diabetes, and more. No matter what state the person's in, if it's experiencing a chronic disease, exercising, and having some activity in their lifestyle on a consistent basis is a powerful protective measure. Again, two and a half times more likely to die from COVID-19 if folks are inactive based on this analysis.

Now with The Model Health Show, we always like to zoom out a little bit and look at, okay, this is a really interesting occurrence in this particular study, but what are the underlying mechanisms? Let's add a layer of proof to it and take it just from being something that's an observational happening and look at what are some of the underlying mechanisms. And do we have peer-reviewed evidence to affirm this even further?

Well, one of those factors... Let's take a look at a study, and this was published by researchers at Appalachian State University, and they found that simply going for a short walk, simply having a consistent routine of walking boost our immune parameters, most notably for our neutrophils and natural killer cells. And these are two of the most powerful immunological weapons that defend the body from SARS-CoV-2 infections, and also recovery, if you become infected. Just by walking.

Now, here's the thing. Walking is free. It's free. It's a free intervention. And yet, I have not a single time... I don't... Honestly, I mean, the news is the blues, I don't watch it. But, you know, I'm very confident that not one time has any public health official cited the data and importance on people getting out and walking. As a matter of fact, they're telling you, don't go outside. Alright? Stay inside. They didn't even tell you to walk in place, though, you know. So, it's just not an important tenet, because it doesn't fit the narrative, it doesn't fit the paradigm of that, "There's nothing you can do, but wait for us to come up with a drug," or use these superficial mitigation tactics to stop the spread. But the funny thing is, this stuff just keeps spreading. Right? It's not like butter, though, it's like Country Crock. It's spreading like Country... Partially hydrogenated spread, alright? It just keeps happening. Parquet, right? So, on that.

Anyway, so in addition to that, we can see this was published in PLOS One, Public Library of Science, One. PLOS One. This was years ago. Again, there's so much data on this, we could do

show after show after show, just focus on this one particular intervention, the seemingly miraculous benefit surrounding physical activity and exercise. But this study published in PLOS One revealed that a consistent exercise program significantly reduces susceptibility to viral infections. They just put it point blank. Let's just get to the point. This was published in 2008, PLOS One, one of the most prestigious science journals, medical journals out there, alright? Consistent exercise significantly reduces susceptibility to viral infections. Who cares? Exercise, smexercise. You care, I know you care, I know you care.

We've got to lead by example, we've got to take care of ourselves more than ever, we've got to lend this information, be unafraid to share it, be unafraid to speak your truth, to share your voice, to share this data, to encourage others to have a stronger sense of sovereignty and empowerment that they can be healthy, that they can defend their bodies, their bodies can be defended from all manner of infectious diseases. Because again, at this point it's 2021 going on 2022, are we still calling it COVID-19? Are we at COVID-23 yet? Like that movie, shout-out to Songbird, I've never seen it. Amazon... It's a... Came out the very beginning of the pandemic where they were... You know, again, how did they film it and get the preview out, get the movie out so quickly? That makes me... I'm a little concerned about that. But the premise of the movie is, it was COVID-23. And they had the lockdowns. Right?

And there were some people, they got like, you know, markings because they're immune. You know, the select few, they're immune to it. But other people in these lockdown situations. Hmm, is that life imitating art or art imitating life? I don't know. But we've got... It's not even the same thing anymore. It's not even the same thing anymore. And we're still singing its praises, we're still shouting its name, we're still giving it credit, you know? I'm just using it... COVID-19 has very little emotional connection, connective tissue for me. I'm using it as a means of communication. For other people, it is associated with so much death and destruction, but it's just a name. It's just a name. And we've given it to categorize not just a list of physical symptoms, but a massive list of global breakdowns, a massive list of global problems. It's far too powerful. We've given this term far too much power, we've got to take our minds back.

So, we know that exercise has a significant protective effect against all manner of infectious diseases, but also obviously chronic diseases as well, it's well documented in mountains of peer-reviewed evidence, but let's lean back into its connection with COVID-19 because we've got a brand-new study. The first one that we covered on COVID-19 and exercise was conducted by researchers in California. This new study, and this was published in the British Journal of Sports Medicine, and it analyzed the data from over 75,000 well documented records in this country. So, this is from folks in South Korea, very, very well documented hospital records, and their overall health records, in looking at this connection with exercise and COVID-19. So, I'm going to give you an overview, then we'll dive in deeper. But number one, they found that

regular exercise has a notable protective effect against contracting a COVID infection in the first place. So that's point number one.

Number two, even stronger than that notable effect, regular exercise appears to slash the risk of severe COVID infections, and I'm going to talk about some specific numbers on that. Number three, regular exercise was found to dramatically reduce the risk of death from COVID-19. Now again, they did a good job for also accounting for some of the confounding factors that could play into some of these effects that you're about to hear about, but they also noted that there could be some other things that play a role here, like, folks that regularly exercise could... Another role that could be playing here is that they might also consume less processed foods, for example. And so, some of these things, there can still be some confounding factors, but after them doing a really well thought out and well documented analysis, exercise really rose up as something very remarkable in reducing the risk of COVID-19. So, let's dive in and talk about that.

Now, if you're watching the video, you can see that they were tracking the benefits of aerobic exercise and even strength training exercise as well. And in the data, what they uncover was that strength training had benefits in reducing rates of infection and reducing rates of severe symptoms, while aerobic exercise showed even greater benefit in reducing rates of infection and specifically dramatically reducing rates of death from COVID-19. But here's the key, the combined engagement of consistent strength training and aerobic exercise outperformed them all and made the risk of severe COVID infections absolutely plummet.

In one cohort, people who regularly strength train and utilize aerobic exercise had a 27% lower risk of contracting COVID-19 infections in the first place. Pretty remarkable. Not perfect protection, as they say, but pretty remarkable. And also, they found that folks who regularly strength train and do aerobic exercise, they also had a 57% lower risk of severe COVID-19 symptoms. That is remarkable. That is remarkable, and it's sustainable. It's not a drug intervention, it's something that our own bodies do, and the side effects are a resounding snowball effect of good, a resounding snowball effect of more and more benefits, versus the downside of symptoms and severe outcomes from medical interventions that we don't even have any idea about.

We know that humans are designed to move, movement is something our genes expect from us. Life is movement. And more and more good things happen when we engage in the thing that our DNA expects us to do. So again, 57% lower risk of severe COVID-19 symptoms for folks who regularly strength train and do aerobic exercise as well.

In yet another cohort in the study, and they broke this down into, there's an inactive group, the sedentary population, then they have a group that's insufficiently active who they're still

active, but they're not meeting those kind of required standardized exercise minutes a week like in our culture, it might be 120 minutes of moderate exercise every week, for example, but people who were active but insufficiently active, then they have people who were in the category of folks who were the active group, really meeting those parameters, and then we have another category of folks who were in the highly active group. So, here's what the researchers uncovered. In this cohort, the active group who were sufficiently meeting their prerequisites of exercise each week, they were found to have a 22% lower risk of COVID-19 infection in the first place, a 38% lower risk of severe COVID-19 and an 83% lower risk of death from COVID-19 by being sufficiently active each week.

Now, even, again, the insufficiently active group did have a 10% lower risk of COVID-19 infection, that's pretty good. 22% lower risk of severe COVID-19 and a 19% lower risk of COVID-19-related death than the completely inactive sedentary population, which we have millions of people here in the United States who meet those parameters of living a sedentary lifestyle. So even just being a little bit active, you get a significant degree of protection.

In the highly active group, and this goes into that U-shaped curve of benefits who are doing the most, who are exercising sometimes excessively, they still had significant protection, but not remotely close to the sufficiently active group, the people who are meeting that nice baseline numbers. But this can be part of the reason why we might hear these cases where somebody's running... My friend's doctor who runs 200 miles a week, he got sick, he got COVID, and he passed away without any context. So, we define health as people who are just exercising their face of.

Now, we can engage... Like there are people who are really thriving doing endurance and putting in a lot of miles and exercise, some of these folks are my friends and colleagues. Well, we've got to realize that this is also a stressor as well, exercise is a well-noted hormetic stressor and what that means is it's a physical stressor and also a stressor for our mind, for our brains as well, but it's a physical stressor that makes our bodies better, that comes... Our bodies come back better when it's able to recover from that stressor, so it's a hormetic stressor, potentially beneficial stressor, but it's still a stressor. And if you add that component of excessive exercise on top of the psychological fear, on top of emotional stress on top of work stress, and the financial stress that's going on in the world, and you just start stacking these stressors, and this can lead to a severe breakdown of the immune system, of the nervous system of our bodies overall.

So, we got to keep this stuff in context, just because somebody exercises a lot doesn't mean that they are sufficiently healthy, and that's what the data indicates, again, it's a pretty clear U-shaped curve of benefits. So not to say that we can't be exceedingly healthy if we are putting a lot of miles in and exercising a lot, but we've really got to make sure we're checking these

other boxes of recovery and making sure that we're coming back better, managing and modulating that other stress, and stop allowing people to use those cookie-cutter answers, those cookie cutter summations that perfectly healthy people are dying because we're acting as though this condition is indiscriminate, when in fact, 95% of people who've died from COVID-19, and this is reported by the CDC, have an average of four pre-existing chronic diseases and/or co-morbidities. And their recent report analyzing those 540,000 test subjects and 800 US hospitals, it was found that 95% of them had at least, at least one pre-existing chronic disease.

At least one, with when looking at hospitalizations, hypertension leading the charge, metabolic dysfunction, and diabetes, and of course, fear and anxiety-related disorders as well, leading to hospitalizations. But for death, obesity is number one, and anxiety and fear-related disorders being the second leading cause of death, and then followed closely by diabetes and its related symptoms as well, it's relating implications.

So, these pre-existing conditions really filling that charge for 95% of people, but what the news continues to highlight some people throwing out of their mouth, vomiting, is that perfectly healthy people are dying too, which... Yeah. Okay, but don't do this whataboutism. Don't ignore that 95% of people are not well, in the first place. Don't allow people to do that. Don't allow people to brush it off and miss the point. Which is another for me, fear is the number one virus, and missing the point is the number two leading virus affecting people today, chronically missing the point because it's just ignoring the things that we can do something about.

Anybody on planet Earth can get sick. Absolutely. But now we've turned sickness into a death sentence in many aspects, like we can't even get sick anymore, you can't get the sniffles, got to go get a COVID test. It's just become this massive distraction and turn away from basic human principles that being sick is a part of life and it's okay.

Now we're dealing with something especially complex right now, but we've got to keep this stuff in context and not let it run away with us, run away with our minds. And we're never going to fix the underlying problem, the thing that's making us the most susceptible, if we don't acknowledge that it's real. Yes, perfectly healthy people can have severe symptoms as well. Yes. But the likelihood is infinitesimally small compared to somebody with pre-existing diseases who are sedentary. And as we're highlighting here, who are a victim of polypharmacy, being on a myriad of drugs, and I say victim intentionally because often again, we're not actually addressing the underlying issue that's requiring the medication to treat the symptom, but also as we've discussed, fear and anxiety, and in this instance, exercise being another... Or sedentary behavior being another risk factor, and exercise adding a level of protection in this era of COVID-19.

Now, the scientists in this study, again, published in the British Journal of Sports Medicine, they wanted to extrapolate and analyze why. And I love this, this is what this... I'm a why guy, I want to know why it's working. I want to know the inner workings to analyze why exercise actually appears to be so effective in protection against COVID-19. And one of the reasons that they cited is enhanced immunosurveillance. Immunosurveillance. This sounds cool. I want my immune system to have top-notch surveillance technology, to be in the van... I want my immune system to have all the vans, all the phone taps, all of it, to be able to... For this purpose, immunosurveillance is a process by which the cells of the immune system look for and recognize foreign pathogens, alright?

So, they are extrapolating, looking at what can be these remarkably protective effects of exercise, immunosurveillance, which is heightened by increased immune defense activity and metabolic function by enhancing immunoglobulins, anti-inflammatory cytokines, neutrophils, T-cells, B-cells, and natural killer cell subsets, all from exercise. And it's free.

Number two reason. So, number one is enhanced immunosurveillance. I want the guy in the van. I want him. Number two reduced systemic inflammation, which is promoted by the recirculation of immune cells that modulates an anti-inflammatory and antioxidant state through multiple pathways induced by exercise. And number three, improved regulation of the immune system and, this is important, delayed onset of immunosenescence. This is another thing that exercise does that almost nothing else can do in our reality.

Immunosenescence really refers to the gradual degradation of our immune system associated with aging, it's associated with aging, and it's regarded as a foundational reason why elderly individuals have higher rates of susceptibility to COVID. This is why. Foundational reason. But it's not just COVID-19. This is not... COVID-19 is new, but the susceptibility, growing susceptibility to infectious diseases, that's not new. This is well-known, well-established. So again, the out-picturing's of what we've seen can already be predicted by people who have a well-balanced knowledge of how science and real health work. Alright, so helping to delay the onset of immunosenescence, keep those immune cells healthy and robust for a longer amount of time. So that's the remarkable benefits that the researchers extrapolated, again.

The third risk factor here on a list of five risk factors for COVID-19 infections and severe outcomes that you're probably not hearing about, sedentary behavior is a third one. Number four on our list. This one is massive. Now, if you listen to The Model Health Show, you have heard this one, but not just a superficial thing, like "You should do this," but we talked about the science. But one of the other biggest risk factors for COVID-19 infections severe outcomes that people are not hearing about is vitamin D deficiency. At this point, we have dozens of peer-reviewed studies analyzing the efficacy of vitamin D in relationship to COVID-19.

For instance, a peer-reviewed study published in Scientific Reports, took a set of people with confirmed cases of COVID-19 who had no symptoms, and those folks were called Group A, they were put in a group A, and they tested their vitamin D levels versus a group of people with COVID-19 who suffered from severe symptoms, these folks were Group B, so no symptoms, COVID positive, severe symptoms, COVID positive. And here's what they found. The scientists uncovered that the people with severe symptoms were significantly more deficient in vitamin D than people without any symptoms at all. The researchers stated that, "The fatality rate was high in vitamin D deficient Group B. Vitamin D level is markedly low in severe COVID-19 patients. Inflammatory response is high in vitamin D deficient COVID-19 patients. This all translates into increased mortality in vitamin D deficient COVID-19 patients."

Do you think these scientists just want to create some controversy? This very important critical aspect of our immune system being vitamin D, a master regulator of our sex hormone, our steroid hormones, and influencing everything from our bone density to even regulating our body's response and regulation of cancer, influencing processes like apoptosis, this programmed cell death. And this is all outlined, we did a masterclass on vitamin D and really directed, like how does it all work, how does your body make it? What are the food implications here, what are the regulatory mechanisms, how is vitamin D involved in obesity, which that was pretty shocking, cancer, and of course, COVID-19? So, make sure to check out the vitamin D masterclass. One of the most important episodes that we've done recently.

And so again, really analyzing the impact of vitamin D in COVID-19. These researchers are just... They're not trying to be controversial. But unfortunately, when COVID-19 hit the scene, there was censorship going on when people were speaking about things like vitamin D. And it's just like... This is the craziest thing, I would have never thought that something like that would happen, but it did. And so now some of these things are softening, but it's because people are just really getting fed up with the idiocy and the suppression of science, and more and more... It's becoming more and more clear that things that we were talking about in the very beginning are still reigning true, they're reigning supreme. And so, one of those things being the role of vitamin D.

Now again, there are dozens of peer-reviewed studies affirming the connection between vitamin D deficiency and COVID-19, including another study, and this was published in the British Medical Journal, the BMJ. And they found that COVID-19 ICU risk is 20 times greater in people who are vitamin-D deficient. If you could see the video, I just did a Macaulay Culkin face slap. I didn't even try to; my hands just came up and did it. 20 times not two times, not five times, 20 times! It's insane.

The researchers noting took special emphasis in the study to note that folks with darker skin, darker complexion, African-American communities are specifically at the greatest risk that

they were seeing in this particular analysis, and obviously this has to do with the complexion of the skin, the melanin aspect, it really functions as a built-in sunscreen in many instances, and it can, in a sense prevent the skin from absorbing as much UV radiation.

Now, this all has to be kept in context because this speaks to your individuality and how much sun exposure you would need to naturally produce vitamin D tailor made for you within your own system, and we go through how that process works in the vitamin D masterclass. But just know that our needs are still the same. We require sunlight, it's something that our genes expect from us, this is what we evolved with, without the sun, we would not be here. It literally is, has fostered life on this planet, now it's more of a... It's just seen as a killer, "The sun's out to get you," but again, it's without context. We all need adequate sun exposure, and so making sure that we do that, what's right for us and not being... Of course, we're not trying to get sun burned, we're not talking about that. But in order for us to... And by the way, a little fun fact, the sun is the most powerful virucide in the environment. So that means it kills viruses, by the way. Just a little fun fact, a little for your back pocket. Pull it out at a dinner party.

Okay. Now another study, and this wasn't just looking at vitamin D in relationship to prevention, but also looking at it in terms of treatment for COVID-19 infections. Now, this was a top-tier study, this was a randomized placebo-controlled study. This was, again, published in the BMJ shout out to the BMJ for putting this into play and actually seeing what happens, but this randomized placebo-controlled study gave patients with SARS-CoV-2 short-term, high dose vitamin D for seven days.

And they gave another group of SARS-CoV-2 patients a placebo. Here's what they found. A greater proportion of vitamin D-deficient individuals with SARS-CoV-2 infection turned SARS-CoV-2 negative faster, with a significant decrease in the inflammatory biomarkers that they analyzed when they were given high-dose vitamin D supplementation. So, they turned SARS-CoV-2 negative faster, and also had a significant decrease in their inflammatory biomarkers. The amount that was used in this particular study was 60,000 IUs daily for that short period. It's just a short stint. Pretty high amount, that you would consider to be high, but the toxicity level of something like vitamin D, it's not like these drugs out here. It's not like the drugs out here on the streets, alright?

The upper limit of safety is just incredible. So, 60,000 IUs daily for a few days during the stint to help patients to get better, wow, that's really remarkable. And just a day-to-day health maintenance and disease prevention, something in the ballpark of 1000 to 5000 IUs daily is pretty normal and also... But again, we want to make sure that we are accessing natural sun exposure for this process, and in addition to that, we can look to... There are some foods that have viable source of vitamin D, but vitamin D supplementation is a place that we can really look towards in this instance. So, some of the foods, we'll just hit really quickly, salmon. Wild-

caught salmon has an average of about 900 IU of vitamin D per 3 1/2 ounce serving. However, farm-raised salmon contains only about 25% of that amount. Still, one serving of farm-raised salmon provides 250 IUs of vitamin D or 30% of your daily value.

We see the same numbers or similar numbers... Not as much as salmon but we see it in halibut, mackerel, cod liver oil. Egg yolks have a little bit, about 40 IUs of vitamin D. And if you're looking at something for the plant kingdom, mushrooms are a viable source. Again, they don't really match up if you really look at the data as far as the vitamin D content because they're rich in vitamin D2 and not the usable... Well, almost usable form of vitamin D3, because in the masterclass, I actually talk about vitamin D still being a building block for... The ultimate thing that the body uses for the processes that you're looking to evoke. And according to data cited in the American Journal of Clinical Nutrition, vitamin D3 may be up to two times more effective and efficient for our bodies than vitamin D2. So wild mushrooms can easily contain 2000 IUs of vitamin D2, not D3 though, in a 3 1/2 ounce serving. So, I just wanted to share that with you as well.

But again, vitamin D3 is something, especially during this time that I would encourage folks to look towards some supplementation on this, especially if you're below, what we talk about, the 37th parallel, as we move into the cold and flu season, because the 37th parallel... The states below that here in the United States are still getting a sufficient amount of the right spectrum of UV light to continue to make vitamin D, but above that 37th parallel, you just don't get it. It's just not happening. So, looking at this coming up here because chances are, the shizzle is going to hit the fizzle once cold and flu season gets here with all of the crazy stuff going on. So, vitamin D is of the utmost importance.

And to break that down for you, in supplementation, I'm always asking, "Where is this actually coming from?" Lanolin is often used for supplements that you find out there because it's really cheap. It's really cheap to create compared to fish oil sources, for example. But lanolin, also known as wool wax, which is wax that is created by the sebaceous glands of wool-bearing animals, essentially, is what helps to keep their wool lubricated, nice and wooly. Primary, lanolin is used for supplements. The primary source is going to be coming from sheep's wool, so that's what you're getting from a lot of vitamin D supplements out there.

Now, another much more preferred source of vitamin D3 is actually from something called lichens, and lichens are being studied right now for a whole host of benefits, really fascinating research. And lichens are a unique combination of algae and fungi that are one of the most resilient and abundant entities on planet Earth. Truly one of the most abundant things on the planet. Now, this is a vegan source of D3, which is incredibly rare. That's the thing, as I mentioned with the mushrooms. Now again, this is a very, very rare occurrence, having a vegan source of the D3, making it one of the most popular D3 supplements in the world.

My family and I, we actually use a vitamin D3 spray from Onnit. And I take it sublingually, I spray it under my tongue, it's absorbed a little bit faster that way, and it's based on lichens. This is why I liken it a lot more and it's just one of those extra layers of insurance because I also want you to know this, a lot of the vitamin D supplements that are out there, they also... Because vitamin D is fat soluble and they use really poor-quality oils, like soybean oil, corn oil, that lead towards...

Just being in encapsulated form, they're going to be rancid and not very protective and bioavailable. It's not going to lean towards the bioavailability of the vitamin D3 and also have some kind of pro-inflammatory effects themselves. But in Onnit's D3 spray, it's placed in a base of high quality MCT oil derived from coconut in a natural tasty flavor, so definitely, get yourself some of the vitamin D3 spray from Onnit. Go to onnit.com/model, that's O-N-N-I-T.com/model, and you're going to get 10% off of their remarkable D3 spray and also their incredible plethora of high-performance human optimization supplements, foods. And also, their fitness equipment is really world-renowned with their primal bells, the kettlebells, the primal bells, the steel clubs and maces. Onnit is just an amazing, amazing company, so go to O-N-N-I-T.com/model. You're going to get 10% off everything they carry.

Now, moving on, so this is number four on our list of the five risk factors for COVID-19 severe infections that you're probably not hearing about, and number five on our list is sleep deprivation. A recent study published in the British Medical Journal tracked the data from a multitude of countries to analyze the impact that sleep deprivation could be having on SARS-CoV-2 infections. And the study concluded that longer sleep duration is directly associated with lower risk of COVID-19 infections. And what the researchers extrapolated was that everyone hour increase in the amount of time spent asleep at night was associated with an additional 12% lower odds of becoming infected with COVID-19.

So just say somebody's getting five hours of sleep, they bump that up, they add on another two hours, that's 24% reduced risk of contracting the COVID infection based on their analysis. Pretty remarkable. But they noticed specifically, this was an hour increase in the amount of time spent sleeping at night, because the daytime nap, like getting that in to account for this situation... And by the way, this was looking at healthcare workers specifically, who not just in this instance, in this pandemic, but prior to, are one of the most sleep-deprived populations of people, not even just in the field itself, but even in medical school.

When I was working at a university, a nice percentage of the people that I'd work with, who were coming to me for help, were nursing students, medical students, people who are working towards their degree already just getting smashed, sleep deprivation, poor quality nutrition, sedentary behavior outside of just walking around the hospital, but not being taught how to

take care of themselves and to manage stress in these conditions. And just putting people in this revolving door that is beating them to a pulp and not really supporting the healthcare workers who are entrusted with taking care of our health and supporting us with our health. And I rephrase that because it's ultimately our responsibility first and foremost to take care of our own health. Our healthcare practitioners can be a great support, can be great coaches and cheerleaders, but ultimately the fork is in our hand, no one can do our push-ups for us, nobody can sleep for you. I can't be like, "Braden, can you go and get... Go get me some shut eye." If we could do that, that'd be amazing. But that's not how it works.

So I just wanted to add that little nugget in there, and again, this study was really fascinating because it's looking at a population of people who are being ignored in this situation, who should be top of mind for our analysis, because according to a CDC report, analyzing healthcare workers affected by COVID-19, they found that 90% of healthcare workers hospitalized with COVID-19 had at least one pre-existing chronic disease, 90%, nine out of ten. I don't know how to make this any more clear, and yet it's framed as this indiscriminate condition and there's nothing you can do about it.

We can get healthier. Almost 75% of healthcare workers hospitalized according to the CDC, were obese, almost 75%, as far as these pre-existing conditions. I've seen it first-hand. Some of my favorite people of all time are the nurses that I've worked with over the years, and just seeing how the system just beats them down when there's so much that can be done to help to affirm and support the health of our healthcare workers who again, these are folks who are running towards the problem, they run towards the fire when others run away. We can do better; we just don't have a culture. We don't have a culture of health, period, in our country, in our society, let alone a culture of health in the healthcare system. You're kidding me, why would they do that? Why would they have a culture of health in the healthcare system?

So, putting these things all in context in this episode, just keep it in mind that sleep deprivation is one of the leading risk factors for COVID that you're not hearing about. And in this particular study, this is an observational study, so keep this in mind, and unfortunately, this is some of the best data that we have on the subject this far, this could be much, much more studied and it will. It'll get its proper attention eventually, but I'm going to share some stronger peer-reviewed evidence on the subject here, because this issue is much bigger and participants, they analyzed here, in this particular study, participants with multiple sleep problems, including things like difficulties falling asleep, difficulty staying asleep or needing to use sleep medications, had an 88% greater odds of contracting a COVID-19 infection.

I'd like to say that these things aren't big issues in our society, but as mentioned at the top of the show, about 115 million Americans are regularly sleep-deprived, already not to mention the corona-somnia in the scenes and all the disruption taking place there. It definitely plays a role,

because sleep plays a major role in regulating our immune system. Now within that, stress can be a big player in our overall sleep quality. And this study also analyzed folks experiencing burnout. And they uncovered that the individuals who are experiencing burnout were more than twice as likely to contract COVID-19, and these subjects were around three times more likely to have severe infections and require a longer recovery period. We cannot... Again, people who are perfectly healthy can run themselves right into the ground.

Dramatically increase our susceptibility to infections and very poor outcomes. This is a time to double down on health, this is a time to triple down on health. This is a time to focus on health like never before, your own personal physical health, and also your mental health, and also the health of your family. This is the time, right now, to put it all into practice and to demonstrate, to be a model for what's possible. Now, in this domain of sleep wellness, the researchers trying to explain their findings, the researchers stated, "The mechanism underlying these associations remains unclear, but it has been hypothesized that lack of sleep and sleep disorders may adversely influence the immune system by increasing proinflammatory cytokines and histamines." You think? You think? What do you... What do you mean it remains unclear? We know this guys. Again, people are smart with their thing, they're smart with their own thing, their own way of thinking.

It takes somebody who is willing to work on themselves and to evolve their thinking, to think from multiple perspectives and to look at systems and not just isolated events, to look at how things work together and not just this one thing. Because research published by the Mayo Clinic, for example, shows that people who don't get quality sleep or get enough sleep are far more likely to get sick after being exposed to a virus. Your sleep quality plays a huge impact on the function of your immune system. A study cited in the European Journal of Physiology detailed how sleep deprivation suppresses the production and performance of our immune cells leading to immunodeficiency. It is during sleep that your immune system releases cytokines, some of which actually help to promote sleep, by the way, a little fun fact. But we're hearing about cytokines without context. Just the cytokines storm, all bad, bad, bad, bad. Cytokines are important immune system, immunological force, and it's just helping and supporting the intelligence of these cytokines.

Certain cytokines need to increase when you have an infection or inflammation or when you're under stress. Sleep deprivation decreases the production of these protective cytokines. Also, the production activity of infection fighting cells and antibodies are reduced during periods when you don't get enough sleep. Why is this happening? Researchers at Albert Einstein College of Medicine published fascinating research regarding the circadian rhythm of the immune system itself. They noted that your immune system is heavily influenced by external cues, and this is your body and your physiology in relationship to time and the environment, so circadian medicine. Light and dark cycles, for example, synchronize functions of your

immune system, regulated organs and glands. So, the very organs and glands that regulate, that produce and mobilize your immune system, your immune cells, are heavily influenced by this circadian timing system, light and dark cycles, and sleep improves your immune system function. And this is just a small instance, a small slice of just how much our sleep regulates our immune system.

And again, these are the risk factors that you're not hearing about, sleep deprivation, abnormal sleep patterns, suppressing your immune function, immunodeficiency, that's not good. Immunodeficiency, at a time like this, not good. But again, sleep is free. So, of course, there are things that we can do to improve our sleep quality, that might be something that we invest in or there might be things that we just proactively do in our lives. And if you've yet to read my international best seller, *Sleep Smarter*, and... So grateful for this book, it's translated now in over 20 different countries, foreign publications, so it's widely available and it has 21 clinically proven strategies, clinically proven strategies to improve your sleep quality. 'Cause it's not just about sleeping more, it's about sleeping better, sleeping smarter. So, it's an incredible resource. And one of the things that I highlight in the book is how our nutrition has a major impact on our sleep quality, because our nutrition is providing the building blocks for our sleep-related hormones and neurotransmitters. And I actually highlight this even more in my latest book, *Eat Smarter*, I really dig in deeper on this.

And I know that this is going to sound crazy because it's outside of our paradigm, but it actually has thousands of years of documented history of use, thousands of years, so it's not some new invention. And the beautiful part is today we have a growing amount just... Man, it's getting crazy how many peer-reviewed studies we now have demonstrating its efficacy for immune health, but also for sleep wellness. And I'm talking about Reishi medicinal mushroom. A study published in the journal, *Pharmacology Biochemistry and Behavior*, found that the renowned medicinal mushroom reishi was able to improve sleep latency, meaning it helps you fall asleep faster, improve overall sleep time, and also was found to improve your sleep efficiency, so the quality of your REM sleep and non-REM sleep.

Really remarkable and also has some remarkable implications for our immune health as well, that you could just have a field day researching. But reishi's one of my favorite things to have in the evening, the key is that it needs to be dual extracted, that means it's a hot water extract and alcohol extract together in a powerful tea and I get it from Four Sigmatic. Go to foursigmatic.com/model, that's F-O-U-R-S-I-G-M-A-T-I-C.com, and you're going to get 10% off of their incredible reishi formula. And also, my son, Braden, who hopped on a little bit earlier, he actually had today, a reishi hot cocoa. That's one of his favorite vibes to start the day with. Come here, B. Tell them about your hot cocoa.

BRADEN STEVENSON: Every morning, my dad makes me hot chocolate. It's very delicious, it's my morning thing. And my dad makes my mom a hot chocolate... I mean, a hot coffee. I get those two mixed up. Put a little marshmallow sometimes, make it a little bit more tasty. And I just drink it really good. I usually just go for the marshmallows first...

SHAWN STEVENSON: Alright, thank you, buddy. So, he actually demands that I make their hot cocoa and coffee. You know you're your Mom's secret agent now. What do I say I am to you guys? Servant! That's the mission, to be a servant here to others, alright? So yeah, sometimes I sprinkle in a couple of little organic marshmallows. It's still marshmallows but sprinkle those in for them, but the power of reishi and the organic cacao as well that's there, just remarkable to get those nutrients into his superhuman body. So, we all have this superhuman potential and so just fueling our...

And this is the beautiful thing, I love to upgrade. I love when companies have the insight, "Let's upgrade things that people are already doing." People are already drinking coffee, kids are drinking hot cocoa, us as well, grown-ups are drinking hot cocoa. What if we can upgrade this and deliver some nutrients into our bodies that just provide remarkable benefits, like I just mentioned, improving sleep quality, and also reducing symptoms of anxiety, and the list goes on and on. And some of the most remarkable things are seen with medicinal mushrooms like reishi, chaga, lion's mane, cordyceps, shiitake. You can find the incredible formulas at foursigmatic.com/model. Again, that's F-O-U-R-S-I-G-M-A-T-I-C dot com, forward slash, model. 10% off each and every one of their incredible mushroom elixirs, mushroom coffees, and mushroom hot cocoas. Organic, dual extracted, done the right way.

Now, I really want to thank you so much for tuning into the show today. This is one of the most important topics because we're really breaking down and looking behind the scenes and seeing what is causing so much devastation? What is creating such a susceptibility right now in this era of COVID-19? And what can we look forward to in the future? Because if you're wondering why things aren't going well right now and why the future can look a little bit bleak, it is truly because we are now even sicker as a society than we were when all of this started. People are more isolated now, more sedentary, eating worse quality foods, taking more drugs, more alcohol, more mental stress, more fear, it's creating this even greater incidence of susceptibility and we've got to put the brakes on it. We can stop it. We can transform this thing for the better. But it's going to take us to step up and to do it. We can't keep waiting for them to do it, for somebody to come along, "Somebody should say something. Somebody should do something." You are that person.

You are that somebody. And this is your opportunity. You don't want to look back and say, "I should have done." This is the time to do it. I appreciate you so much for tuning in to the show today. If you got a lot of value out of this, please share it out with your friends or family on

social media. You can tag me, I'm @shawnmodel on Instagram and Twitter, I like to dabble in Twitter, I'll jump in there every now and then, but very active on Instagram. And also, I'm @themodelhealthshow on Facebook as well. And please pop over to the YouTube channel and leave a comment for this episode. And make sure you're subscribed to the YouTube channel. We're going to be providing some really powerful exclusive content to YouTube, so you want to stay tuned there as well. And I appreciate you so very much. We've got some powerful episodes coming for you 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've 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.