

EPISODE 743

Do These 3 Things to Stay Healthy All Winter

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SHAWN STEVENSON: In the words of Game of Thrones, winter is coming. We've got cold and flu season in full effect right now. And on this episode, we're gonna be talking about three very specific science-backed things for you to do to stay healthy all winter. What you're gonna learn today, is gonna help you to avoid the white walkers and you're not gonna have to go and do the night's watch and all the craziness, this is gonna be very practical, very simple things that you can do, again to fortify your immune system, and stay healthy all winter.

SHAWN STEVENSON: Now the question is why do seasonal changes particularly fall to winter bring about more instances of things like colds and flus? Well, one of the factors was detailed by researchers at the University of Cambridge who published data showing that the activity of thousands of our genes differ from summer to winter. The researchers found that the activity of almost a quarter of our genes, over 5, OOO of our genes, differ according to the time of year, with some more active in the winter and others more active during the summer. This seasonality also affects our immune cells in the composition of our blood and even our fat tissue. One of the researchers had this to say, "We know that humans adapt to changing environments, our paper suggests that human immune systems adapt to show different seasonal variation".

SHAWN STEVENSON: Now the goal that we all need to have, is to support these natural changes of our immune system. These natural changes of our genes and not to effectively shank our immune system, shout out to Arya Stark, "Shanking the Night King", by the way. We don't want to do that to our immune system, just because it gets colder outside. That's a time to actually focus more on supporting our immune system health. And these three science-backed action steps are going to help you to do it. Now let's go ahead and dive into number one of these three science-backed ways to stay healthy all winter. And number one is, don't overdo the sweetness. A paper titled, 'High blood sugar can trigger a deadly immune response in the flu and possibly COVID-19, compiled data on how high blood sugar triggers inflammation and an excessive immune response'. The scientists stated, "We can use sugars to trick the immune system into thinking it's a danger signal and stimulate an immune response".

SHAWN STEVENSON: Essentially, these scientists were using sugar to manipulate the immune system. And it makes sense because so many of our cells, including our immune cells, run on glucose but having too much, can create a lot of derangement and in particular, stimulate a lot of inflammation. Now another study, and this was cited in the journal, biotechnology and applied biochemistry titled, 'Harmful effects of high amounts of glucose on the immune system'.



And these researchers stated, "Although glucose is vital for the proper function of immune cells and their proliferation, a high amount of glucose may lead to impaired function of the immune system and pathological conditions. A suitable amount of glucose is indispensable for the immune system, but its elevated amount leads to excessive pro-inflammatory Cytokine production."

SHAWN STEVENSON: Now, it's very likely that you've heard the term Cytokine storm in recent years. Now, this isn't something that just happens, this is something where our immune system is responding excessively to some form of an input. And it's not the thing that does it, it's not the external thing that we come in contact with, it's the response of our immune system, and we want our immune system to mount an appropriate response and not go overboard. That's the key. And so, with this Cytokine storm, we see that high blood glucose is one of those contributing factors, that make outcomes far worse and this is what we saw recently with higher rates of hospitalizations and also deaths, when we venture into diabetes, obesity, and other chronic conditions.

SHAWN STEVENSON: As a matter of fact according to the CDC, and we'll put a study up for everybody to see this, a huge meta-analysis found that obesity was the number one risk factor for severe outcomes from COVID-19, and diabetes and its related conditions, type 2 diabetes, was number 3 most significant risk factor in having poor outcomes including death from this condition. This is something so important for us to understand as citizens living in the world today. We've got to understand that we are reducing our capacity to adapt, we're diminishing our resilience when we are living with chronically high blood sugar levels. We've gotta make sure that this education gets out to the people that we care about, and also of course be mindful of this ourselves. We're not going to be able to mount an appropriate immune response when our blood sugar is deranged. It is a serious, serious issue. And this is something that can be changed, if we just are allowed to have some education on this.

SHAWN STEVENSON: And this is the special thing about this kind of time that we're living in, is that, yes, technology has us kind of distracted and there's a lot of stuff going on, but at the same time, it can be utilized for beneficial things as well. You know, being able to just click play on a podcast like this, and get this information all backed by science, be able to find out these details from peer-reviewed data, again that a lot of people don't get access to, they're not given this information in a way that people can metabolize it and utilize it to change their lives. It's a very, very special thing. I'm very grateful for this. When I first went to college... And my first semester college was 1997. I know you're looking like, that's crazy. I think, my God, you weren't even born yet. What year were you born?

ASSISTANT: 2000.



SHAWN STEVENSON: 2000? My God, my assistant here in the studio was born in 2000. All right. So, I was... I started college before he was even a twinkle in his father's eye. All right, and at the time this was... They were making that transition, 1996, 1997, from like you go to the library's, Dewey Decimal system, the Internet's coming online, all this kind of stuff. We didn't have access to this kind of Information or education at our fingertips to be able to learn from some of the most incredible people in the world, in their respective fields. And so, it's a very very exciting time to be alive, but here's the rub and why I'm bringing this up is, although this information is available, we know that abnormal levels of blood sugar are killing us in a myriad of ways. The average person unfortunately does not truly Understand that and don't understand they have agency to be able to change it.

SHAWN STEVENSON: And I'm saying this because for some people they might be like, "Of course, people know that," no, no, no, I didn't know that, I didn't know that. And I'm somebody with the high GPA, went to college, was taking college credits early, all the things. All right? But I wasn't aware, even in my university classes, that I had real influence over my health. All right. I was programmed to believe that a lot of things "just happened". And I was told that, when I was diagnosed with a so-called incurable spine condition, and also of my bones, I broke my hip at track practice at the age of 15, 20 years old, Advanced Degenerative disease of my spine, so-called incurable. I was told that it just happens. And there was a disconnect between even my nutrition and what my body was doing, period.

SHAWN STEVENSON: I asked a physician, "Does this have anything to do with what I'm eating?" And he looked at me like I was from another planet. Alright, and the reality is, all of our tissues are made from the food that we eat, every cell, every organelle, everything about our physical body, is made from food. But not only that, food is what makes up the fuel, the literal fuel for processes to run, and the communication between all of our cells including our immune cells. We have this bustling field right now of Immunometabolism, and looking at how our immune system is utilizing energy and also metabolic waste products. The list goes on and on. But our immune cells have a metabolism of their own. And so, understanding this, we need to be very very aware of what we're providing our immune cells with. To number one, to make the cells and to number two, run those cells and allow them to do work. All right, work, work, work. This really does matter. All right, shout out to Rihanna.

SHAWN STEVENSON: Now, moving on, why is this so impactful with our immune system and this exposure to sugar? One of the reasons there's a remarkable impact of sugar and the food that we eat overall on our immune system is the interface between our gut and our immune system. A recent study published in the peer-reviewed journal nutrients affirms that over 70-80% of our immune cells are located in our gut, in our G-U-T, and it just makes logical sense by the way, because your gut is a primary point of contact for your body and the



external environment. So your immune system, just through our evolution, the way that we're designed, it better be front and center if something is coming literally inside of your body to make sure that said thing does not kill you or make you sick. The immune system needs to be front and center.

SHAWN STEVENSON: And so, this interface with our immune system and our gut, we're talking a cell, a cell layer thick. That separation between your gut and these immune cells and there is a huge back and forth, infinitely fast 24/7, every single micro moment of our realities, ping-pong data going back and forth with our immune system and the contents and the activity, the Microbiota of our gut. Your immune system is highly sensitive to what goes on in your gut. The most recent peer-reviewed data shows you can shift the bacterial cascade of your microbiome within 24 hours, both negative or positive ways. All right, depending on what you're interacting with, but we all also have a gut environment "set point" where things support certain demographics of bacteria, so even if things shift a bit within that 24-hour, they have a tendency to return to their state, their typical state or their current state of homeostasis.

SHAWN STEVENSON: Now, the response to sugar also depends on the overall health of the host. The response of that gut, the response of the microbiome, the bacterial cascade, to sugar depends on the health of the host. Some people are going to be much more reactive to this sugar input and other people are gonna be more resilient. But even within a short window of bacterial chaos, your immune system can be suppressed and dramatically increase your likelihood of infection due to that sugar input, but specifically, it's added sugar, added sugar. There's naturally occurring sugar. Fruit has naturally occurring sugar. Added sugar is when sugar is added to said food item. So this is refined versions of sugar.

SHAWN STEVENSON: A Study published in The American Journal of Clinical Nutrition uncovered that one of the ways that the consumption of sugar suppresses the immune system, is by directly decreasing the capacity of Neutrophils, this is an aspect of your immune system, to be able to engulf pathogenic bacteria, so it suppresses or diminishes the capacity of these Neutrophils to engulf pathogenic bacteria for them to be neutralized and moved out of our system. Sources like refined sugar, high fructose corn syrup and even pasteurized orange juice were noted in the study to cause this derangement. The greatest effects occurred between one and two hours after consuming the sugar, but the values were still significantly depressed for up to five hours after eating these refined sugars. So it really does a number on our immune cells ability to respond to foreign invaders All right. So keep that in mind. This isn't just hearsay, we wanna make sure that we're minding our blood glucose, and understanding that our response to certain foods is gonna depend on us. We all have a unique Metabolic fingerprint.



SHAWN STEVENSON: And so, this is why I'm such a huge fan of folks at least having a stint, just track it for a week or two, at least once to utilize a continuous glucose monitor to be able to know firsthand, how certain foods affect you versus other people. I've seen my wife and I respond very differently to certain foods, and also her baseline blood glucose is different from mine. And it's so crazy because again, we might think that a food is "healthy" and it might be but it might impact our blood sugar in a negative way that makes that food probably something that we don't wanna eat on a regular basis, and it could be something that's holding us back from achieving our health goals, whether it's weight loss, whether it's improving our cognitive function because blood sugar derangement has a huge role in our cognitive performance.

SHAWN STEVENSON: But the continuous glucose monitor that we use, my wife is actually... She has one on right now, is from Levels. And Levels shows you in real time utilizing continuous glucose monitors how different foods affect you. Levels provides access to continuous glucose monitors and the incredible Levels app that pairs with the CGM's to provide your own personalized data. It is so easy and easy to understand. And the scientists there at Levels, just absolutely amazing. They're providing and accessing all these different data points and sharing them with you to point you in the right direction of goods that can be helpful for you and also guiding you away from things that could be hurting you that you might not realize. And also because of all their data inputs from all of these incredible people out there that are utilizing Levels, they've collected all these data points and being able to target certain foods that for the majority of people that they might think are healthy, are actually problematic.

SHAWN STEVENSON: And also other foods that might be villainized are actually quite healthy when it comes from specifically that blood glucose perspective. And right now, Levels is providing listeners of The Model Health Show a very, very special offer, when you go to levels.link/model. Go there right now, when you get their annual membership, they're going to give you two months for free. So check it out ASAP, that's levels.link/model. That's, L-E-V-E-L-S.L-I-N-K/M-O-D-E-L. Go there right now levels.link/model. Two months free when you get their annual membership. This is a huge, huge resource in being able to track your unique Metabolic health. Find out what foods are best for you. Levels.link/model.

SHAWN STEVENSON: Now, it's important also to understand that we're not here during this time of year. This is a time when the sweetness goes a little bit hard, it gets hot and heavy when it comes to the sweets. Ironically during cold and flu season, like we got... Kind of the kickoff spot, we got Halloween transitioning right into the Thanksgiving with the pies and with the cakes and then we got Christmas right around the corner. Christmas cookies, all right. Cookies are out here heavy and we're not here to villainize these things. We're here to enjoy intelligently and not go too hard. That's the key. And that was number 1 here on our list



is, don't overdo the sweetness. I didn't say don't have any of the sweetness. Have some sweetness. We all need a little sweetness in our lives, but be mindful to not overdo it because, you don't need to hit the cookie, and the pie, and the fruitcake all in one sit down or all in one day even.

SHAWN STEVENSON: Enjoy some of the sweet goodness, but at the same time, let's be more intelligent in our choices. Make sure that we're getting a variety of other key nutrients and foods. Make sure that we're meeting our protein needs, all those different things, but we don't wanna villainize these things, we wanna enjoy the holidays. And also, there's so much to enjoy. Growing up, I grew up in two very, very different environments. Being biracial, I had my white family, I had my black family. At the white family, we had pumpkin pie. Pumpkin pie. Black family, sweet potato pie. All right, I got to experience both. But by the way, we tend to lean one way or the other. We tend to have our preferences, but they're all out here on the streets. Both of them delicious. And even with that said, there are some cultural bridges with all these different things as well. Everybody's got the turkey out here, you got the cranberries.

SHAWN STEVENSON: But then, different families have different traditions. For whatever reason, on my black side, my grandma, Ola May, would make spaghetti every Thanksgiving. Spaghetti? Yeah, she'd make some spaghetti. It was fire as well. And then, with my white grandmother, Carol Sue, we had this pickle dish, I don't know what it's called, but I guess it's a Charcuterie board today. Now I know what it is, but it would be like these different kinds of pickles and cheeses, stuff like that. And I just called it the pickle dish, pickle tray. But this is a really special part about the holidays, is just being able to spend time with family to experience different food experiences and to also be able to have some of our favorites. Sometimes we don't eat very often. And my avocation is for us to do our best to improve the quality of the foods that we're getting, improve the quality of the ingredients that we're using. Making sure to the best of our ability that we're not utilizing a lot of highly refined sugars, a lot of pesticides being integrated into the products that we're buying, but just making smarter decisions, improving the food quality that can improve our health dramatically, just that one step.

SHAWN STEVENSON: So we want to absolutely enjoy the holiday season, but also be mindful that one really tough interaction, one overboard interaction with a lot of sugar can definitely suppress our immune system. And this is a time for us to, yeah, absolutely enjoy, have some treats for sure, and be mindful that we don't have to eat all of them. We don't have to have all the things all the time. All right. So that's number one of these three science-backed things to stay healthy all winter. Just simply don't overdo it with the sweetness. Alright? Get some sweetness, have some sweetness in your life, but just don't overdo it. And speaking of which there are many different types of sweetness. It isn't just from the food that we eat. It's also



something that we can be able to garner from our relationships as well. And that moves us right into number two on this list of three science-backed things to stay healthy all winter.

SHAWN STEVENSON: Number two is to get closer to family and friends. Many of our most elaborate holidays are during the fall and winter to celebrate life and also to get our spirits up. This is something that our ancestors have been doing for centuries, knowing that this is the time of year. You can get a little cabin fever. You can get a little bit of the winter blues and to create some celebration and connection and being around people that we care about. Now, one of the most interesting fields of science looking at the microbiome is looking at the interface, the interplay between different family members in the environment. And not just that, but just the people that we're around, there's like a data or a file sharing of our microbes when we're in proximity to other people. And this largely, for the vast majority of these cases, is largely beneficial. We might be concerned on what if somebody has something pathogenic.

SHAWN STEVENSON: A healthy immune system and microbial makeup, it's just going to take on that data, that file sharing, and it's not going to feel this big intrusive impact of a pathogen. There are certain people that just don't tend to get sick when everybody else is getting sick, and not to villainize even what we call getting sick. Even in these instances, things have really been kind of twisted the last couple of years, but many of these instances, these are adaptations. Our bodies are taking on this data, they're having this certain reaction. Our immune system is having a certain reaction, but we develop humoral immunity. We develop a memory of our immune system that no longer allows us to get sick from that thing again, we adapt. It is what has allowed us to make it here as a species. And so, if somebody has some symptoms, if you ever have symptoms, it's not a bad thing.

SHAWN STEVENSON: Now, of course, we don't want to be interrupted. We don't want to feel down, but sometimes our body is signaling us to slow down, to be mindful of the things we might have done that could have suppressed our immune system a little bit and just look forward to doing better the next day. Looking forward to focusing more on what I can do to fill my own cup, to feel healthy, to reduce stress, and to take care of myself. And so, with that being said, that's one of the important parts about getting closer to family and friends during this time of year is for that microbial file sharing that is automatically happening. When you're around people, you're sharing microbes. It's super weird, but it's also super cool. And when we are isolated, when we're away from each other, we're not getting this exercise for our immune system. We're not getting these additional inputs that make us more resilient.

SHAWN STEVENSON: Now, one of the most remarkable reasons that we need to focus on getting closer to friends and family during this time of year to stay healthy all winter is because of the incredible effects of oxytocin, the profound human bonding chemical. Oxytocin gets a couple of nicknames, the cuddle hormone, the love hormone. But we produce



oxytocin when we're around people that we care about. Now, how does this impact our immune system? Research published in the journal Frontiers in Immunology in 2016 shed light on how oxytocin has a major impact on our immune system. The researchers detailed how along the HPA axis, the hypothalamic-pituitary-adrenal axis, you'll find the neuroendocrine immune network that's largely considered as the higher regulatory center of the immune system. Within this brain immune system network is the oxytocin secreting system that plays an essential role in overall immune health.

SHAWN STEVENSON: The oxytocin secreting system consists of oxytocin producing neurons and associated structures that can integrate neuroendocrine, metabolic and immune information and plays a pivotal role in the development and function of the immune system. So, this is a place where all of this data, immune data, metabolic data, endocrine data, so our hormones are all getting integrated within this system and oxytocin is right there in the mix. The study went on to state, "The oxytocin secreting system can promote the development of thymus and bone marrow. These are two major aspects of our immune system. Perform immune surveillance, strengthen immune defense, and maintain immune homeostasis. Correspondingly, oxytocin can inhibit inflammation, exert antibiotic-like effects, promote wound healing and regeneration, and suppress stress-associated immune disorders".

SHAWN STEVENSON: Oxytocin is special. It's special, but we make it when we're around people that we care about. We get to choose to do this. It makes us more resilient. It makes us healthier in a vast number of ways, but in particular in the context of our immune system and not getting sick or not getting sick as often, we need each other. We need each other, but this current paradigm has us so separated, has us fearing each other and not giving you informed consent to know that, "Listen, this is about to f*ck you up in all these other ways. Here's all these... Here's a hundred, here's 200, here's 300 other ways that this is going to harm you because you need to stay away from each other." It's not providing context. It is not allowing us to make informed decisions with ourselves, with our health, with our families.

SHAWN STEVENSON: All right. So the number one key is to make sure that we're proactively utilizing science, improving or increasing our resilience so that we're not as susceptible to all manner of infectious diseases. Cold and flu season does not have to come packaged with a lot of dysfunction. As a matter of fact, I'm advocating that this sh*t doesn't have its own season anymore. If we're paying attention to the things that our genes expect us to do, that our DNA expects us to do, that our immune system expects us to do, we need each other. Now, that's the broader picture of getting closer to family and friends, but also we could talk about the romantic version of this, because for a lot of people, especially during Christmas time, it's also known as cuffing season. All right, some people get booed up just to have all the, you know, somebody to exchange gifts with, lots of kind of gifts, by the way. Grown man and grown woman gifts as well.



SHAWN STEVENSON: But then a little bit later, the cuffing season is over and it might not be as essential, but this is why some people have a propensity to cuff up during this time of year. As a matter of fact, cuffing season is here on the urban dictionary and it's defined as the cold season when everyone's coupling up. So you settle for a new boyfriend, girlfriend way below your standards. So sometimes cuffing season might have that ingredient. But there's this propensity towards getting closer in a romantic context and there's actually some really interesting science. And now just to take away from the cuffing aspect, but just talking about love and connection and in the real world, something that is a very, very powerful aspect of life and of humanity and of human emotion. This is what we're really talking about a change in our biochemistry when we're talking about feelings of affection and feelings of love. And we know that they are very supportive of our immune system function, very regenerative and very health affirming, and also a contributing factor to longevity and the decrease in chronic diseases, decrease in the susceptibility to viral conditions. The list goes on and on.

SHAWN STEVENSON: Now, let's talk a little bit about why. In a study titled, 'Falling in love', is associated with immune system gene regulation. This was cited in the journal, Psycho-Neuro-Endocrine-Immunology. The scientists profiled 115 circulating immune cell samples collected from 47 young women over the course of a two year longitudinal study. So they're following these women over the course of these two years. The study found selective up regulation of innate immune responses to viral infections, less likelihood of succumbing to things like the common cold and faster recovery from illness if they did happen to get sick when they had a love relationship. So those relations, having those relations does in fact support our immune system in a plethora of different ways.

SHAWN STEVENSON: Now, one of these factors when getting even closer is IgA, Immunoglobulin A, is one of the first lines of defense against colds and flus. IgA binds to pathogens at all the points of entry to the body then calls on the immune system to destroy them. And regular sex has been found to boost your immune system in particular with its impact on IgA. Researchers at Wilkes university in Pennsylvania found that having sex a couple of times a week in winter can boost the immune system and reduce the chances of catching colds and flus. The study revealed that participants who had sex once or twice a week had higher levels of the antibody immunoglobulin A or IgA compared with participants who got busy less often. So just a little dabbling a couple of times a week boosts this production and mobilization of immunoglobulin A.

SHAWN STEVENSON: Now the researchers did note some diminishing effects. So if you're out here humping like bunnies, a lot, a lot, a lot on a consistent basis, a lot, a lot. All right. I don't know what that is. We different. I'm not trying to advocate against it, but sometimes we're just like we can report and be like, "Listen, I just listened to The Model Health Show and he



said to keep us healthy during the winter, we have to have sex and we might not disclose what the study said, it's a couple of times a week." And you're looking for that daily heater. All right. So a couple of times a week was noted, but in particular, not getting busy. So the lack thereof was notably detrimental as well, so just keep that in mind. We can be healthy all kinds of ways, but I'm just here to share the science.

SHAWN STEVENSON: Now with all this being said, if you're going to get a little closer, then you might as well sip on this. Snuggle up with some fat burning nutrition this holiday season. You know what time of the year it is. It's that time to get cozy. It's that time to snuggle up. It's that time for a nice pumpkin spice, everything. But truly some of the most potent nutrition can be found right in our spice cabinet. And this particular spice that you need to know about has been used traditionally in cooking, medicine, and rituals for thousands of years. And what I'm talking about is turmeric. Turmeric, in one of its most renowned micronutrients, curcumin have well-noted anti-inflammatory effects, but what isn't commonly known is its surprising anti-obesity effects.

SHAWN STEVENSON: A study published in the European Journal of Nutrition uncovered that in addition to down regulating inflammatory cytokines, curcumin in turmeric also up regulates the activity of adiponectin and other satiety related hormones. Turmeric has been found to actually improve insulin sensitivity, reduce blood fats, and directly act upon fat cells. Another really interesting thing about turmeric is that it has anti-angiogenesis properties. A study published in the Journal of Nutrition found that curcumin in turmeric is able to reduce angiogenesis in adipose tissue, which is fat tissue. And angiogenesis is the process of decreasing the blood supply and nutrient supply to those pesky fat cells and also to cancer cells as well. And turmeric has been found to have an intelligent selective capacity to target rogue cells and reduce their ability to grow.

SHAWN STEVENSON: Really, really fascinating stuff. And it's one of my favorite things that's in the gold blend from Organifi. This blend highlights a super critical extract of organic turmeric, plus other metabolism enhancing spices like cinnamon and ginger. And it also has Reishi, which is clinically proven to support your sleep quality. It's a great vibe, great way to relax, and a great time to enjoy this season. Head over and check them out. It's organifi.com/model. That's O-R-G-A-N-I-F-I.com/model for 20% off your gold latte. Check it out. Organifi Gold Pumpkin Spice latte is available for a limited time, so make sure to check them out. Again, 20% off when you go to organifi.com/model.

SHAWN STEVENSON: All right, so hopefully that sexy rendition brought a smile to your face. And smiling and laughter, this is also a very, very powerful benefit for our immune system. And as a matter of fact, a study conducted at Indiana State School of Nursing found that laughter is able to reduce stress and improve natural killer cell activity. So this is another



important aspect of our immune system. And that's really powerful. This is something that we have some input on. Being able to choose to be around people that make us laugh, watching some funny movies or sharing some funny memes and things like that, but just making sure that you give yourself permission to have some joy each day, to laugh, and to enjoy your life to the best of your ability. We know people that are in very dire circumstances that still find a way to laugh and to find joy even in the most mundane things. And so give yourself permission this season. Winter is coming. It's upon us to employ proactively being around people that you care about and also making sure that you give yourself permission to have a good time, laugh, have some fun.

SHAWN STEVENSON: Life is serious enough as it is. There's a lot of things going on in the world and it's going to continue to be that way. And so, we've gotta carve out and choose for ourself to find joy. And, I said these words earlier, I'm gonna say it again, give yourself permission, give yourself permission to experience joy and laughter. It's a birthright. It's an important part of being alive and that's gonna make you more resilient and make you better able to show up for those tough circumstances to support and to help other people. Now that was number two on our list of these three things to stay healthy all winter. Now we're gonna move on to our final one, number three. And this one is to keep moving. A meta-analysis published in exercise and sports science reviews determine that regular exercise significantly improves human immune system responses to infections and reduces susceptibility to viruses.

SHAWN STEVENSON: Exercise is one of the most science-backed ways to stay healthy and resilient, to decrease our incidents of getting sick. Now the issue is during the winter months, depending on where you live in particular, the weather can be less accommodating to do some of the things we might tend to do or want to do as far as physical activity. But we gotta stop. We gotta stop letting us stop us. We need to pre-plan ways to pivot when the weather is not as friendly so that we can get some movement in because truly our cells, our immune system cells need that movement input. And I'm gonna share more data on why that is, but it is critical. It's so important. And there are a plethora of ways. If you find yourself indoors or snowed in... I'm from St. Louis, Missouri. We tend to get extremes of all the different seasons, right?

SHAWN STEVENSON: Spring is super nice. Fall, beautiful. Winter, hmm, ah, it could be a problem. Same thing, summer in St. Louis. That heat does not care. It is blatantly, it has a problem with you all right? In St. Louis because of the humidity, it might be 95 degrees, but 115 degrees with the humidity. And learning the distinction being in St. Louis, a 100 degree heat versus Los Angeles, a 100 degree heat is different. In Los Angeles, a 100 degree heat, you can go into the shade and find some relief. In St. Louis heat, you go into the shade and the heat follows you and chokes you out while you're trying to relax in the shade. It does not care.



And so, having these different experiences, different conditions, I know what it's like. I know what it's like when there's a lot of snow outside or when it's way too hot.

SHAWN STEVENSON: And so finding ways proactively. Mentally, I already got them documented. I've got them lined up to be able to pivot and make an adjustment if I need to. I'm not gonna find myself in a situation where it's just like, "Well, let's just to this, I'm not gonna do anything." And so, this could be, I'm just gonna share with you a couple, I can go on and on with these, but get yourself a mini rebounder, right? So a mini trampoline and have that just in your house if you can't get out to just do some rebounding. Jumping on that mini trampoline, you get some great benefits. NASA's been utilizing this technology for quite some time. These are rocket scientists, all right? Literal rocket scientists affirming that this is one of the best forms of exercise. This G-Force aspect to it, it's making all yourselves kind of do push-ups when you're jumping on a rebounder.

SHAWN STEVENSON: This could be having yourself lined up for some of your favorite exercise or fitness videos, that you can work out along with. There's so many today, so many. And of course, we've got the classics. I mean, we know the OG of OGs in this domain, whether it's Shaun T, whether it's Shalene Johnson, listen and they've both been featured on the show numerous times. Really good friends, icons. So if you have some of their exercise programs, just in your back pocket, if you can't get out to do that. And sometimes, dare I say, even when the weather seems to be unfriendly, sometimes we make it more unfriendly than it really is, right? So maybe this is... It's raining outside, maybe this is an opportunity to still go outside in the rain. Shout out to escape, "I wanna go outside in the rain, nobody could see me crying," all right? That's a remake, by the way.

SHAWN STEVENSON: Or this could be an opportunity, you know, even if it's snowing, like to get that cold exposure. Now you wanna do this safely. I shouldn't have to say this, alright? We're not trying to prove anything here. We're just trying to embrace our environment and get some inputs. A lot of times, like straight up, we can go for a 10 minute walk outside when it might be freezing temperatures and get this input in, get in a quick walk, get this stimulation. You're gonna feel so invigorated from that cold exposure. A lot of times, like we're proactively finding ways to do that. Somebody might do a cold plunge, but they won't go outside if it's cold. Like, come on. So not allowing the weather to dictate whether we're moving or not. A lot of people have different pieces of equipment that you might... You might have a couple things in your garage.

SHAWN STEVENSON: We've got different kettlebells and steel maces, and we've just been picking up little pieces of equipment over the years. Some people have stationary bikes and treadmills and all these, but there's so many ways to pivot. So many different ways. But think creatively. Make sure you have a plan. If you have lived where you live for a number of years



and you know that winter tends to be when you are not able to get out a certain amount of times, pre-plan for that at this point. You know it's gonna happen, just pre-plan. Benjamin Franklin said, "If you fail to plan, you're planning to fail." All right? It's all about the Benjamins. Now moving on, let's talk a little bit more about why this specific thing that our genes expect from us in the form of movement is so important for our immune system.

SHAWN STEVENSON: And just to provide a little bit more context on this, one of the most recent infectious disease outbreaks being COVID-19 was put up against exercise to see the impact that it had. And this study was conducted by researchers at Kaiser Permanente Medical Center and it tracked the exercise habits of nearly 50,000 COVID-19 patients. And it revealed some eye-opening evidence after analyzing their exercise habits over the two years prior to the pandemic, it was revealed that people who did not exercise regularly were two and a half times more likely to die from that virus. Now again, this was compared to people who consistently exercised, but the question is like what does that mean? What kind of exercise? What are they doing? How does this create this form of resilience? Like again, improved immune system function, what's going on there? What are the specifics?

SHAWN STEVENSON: And another study, this was published in the peer-reviewed journal, the British Journal of Sports Medicine. And it analyzed detailed exercise data from a large population of participants. Number one, they found that regular exercise had a notable protective effect against contracting a COVID infection. Number two, they found, and this was even more significant, regular exercise appeared to slash the risk of severe COVID infections. People were just picking up the VI just left and right regardless of their affluence, regardless of their medication choices. It was hopping around apparently on the streets. But people who regularly exercise appear to slash the risk of severe infections. And number three, regular exercise dramatically reduced the risk of death from COVID-19 as well. Now, what type of exercise works best? Cardio strength training. Both. Well, in one cohort of this study, people who regularly strength trained and utilized aerobic exercise had a 27% lower risk of contracting a COVID infection.

SHAWN STEVENSON: And a 57%, almost 60% lower risk of severe COVID-19 symptoms. I didn't say a 100%. Somebody might be like, "I exercise every day, I gotta... " don't miss the message. Don't miss the point. Don't miss out on something that, again, this is not across the board, but we know that this does fortify and improve and support the function of a healthy immune response when we're regularly exercising. In particular as this cohort noted, getting some strength training and aerobic exercise in each week. Now the real question should be, how? How Sway, how? How does this work? How does this work? Now what's happening behind the scenes are some really incredible things. One of the reasons that it works is that exercise enhances something called immunosurveillance. This is the process by which the



cells of our immune system look for and recognize foreign pathogens to effectively make adaptations to them.

SHAWN STEVENSON: So exercise is like your immune systems guy in the van, alright? The one who's running the surveillance, telling you what's up, keeping you posted. And this enhances this immunosurveillance so that our immune cells are more apt and intelligent and ready to identify pathogens. Also, exercise is well noted in a mountain of studies to reduce systemic inflammation. Exercise improves the recirculation of immune cells that stimulate an anti-inflammatory and antioxidant state through multiple pathways. Also, exercise improves immunomodulation. So this is the key. This is the absolute focal point of having an appropriate immune response. It has to do with immunomodulation where our immune system might need to ramp up in some instances or be able to tamper down in other instances and not go too far. And so, exercise improves immunomodulation exercise improves our body's ability to mount an appropriate response to the things that we're exposed to. Special, special.

SHAWN STEVENSON: Exercise also delays the onset of something called immunosenescence. This is the gradual degradation of the immune system associated with aging largely and it's regarded as a foundational reason why elderly populations have higher rates of susceptibility to certain infectious diseases. But exercise dramatically reduces immunosenescence. And if you look at folks that are exercising in their senior years, they are far healthier. They get sick far less often. This is something that it's not being prescribed, it's not being prescribed to these patients to get in a certain amount of steps or to make sure that their's strength training to make sure that their immune system is strong. It's just passing out drugs like candy as if that is the real solution. Because guess what? If you look at the data, and we've talked about this on the show, we have not figured out, there has not been a drug created that has been able to effectively stop colds and flus or any number of infectious diseases.

SHAWN STEVENSON: Like they just keep getting worse. They keep adapting and coming back and people keep getting sick. And what a lot of folks don't realize is that even prior to COVID-19 showing up in our lives, flu deaths were ridiculously high in recent years. But it's not getting its own marketing and headline for people to be informed about this. And a substantial number of people who are getting medication to try to prevent these poor outcomes are still succumbing to those poor outcomes. And the data exists, but people are not being educated about this. One of the most remarkable things is these medications and seeing the dramatic reduction in its ability to actually fortify the immune system if somebody sleep deprived, for example. A review of multiple studies published in the American Journal of Infection Control titled 'Lack of sleep can Jeopardize Vaccine Effectiveness highlights yet another component of real health that's ignored in our current medical culture'.



SHAWN STEVENSON: Folks are simply not being educated about the critical inputs that their DNA expects them to do that are being ignored in lieu of, "Here take in another drug. Do this, do this." You're not gonna get the benefit. Potentially, if there's benefit at all for certain things, you're not gonna be able to extract benefit if you're not doing certain practices that your genes require you to do. We need a more intelligent, well-rounded approach to medicine and to support our citizens so that they have informed consent about real benefits and real potential side effects. And they're also being educated about the things that are essential in actually helping them to get well and stay well, that compliment said medication. And so again, we're talking about science-backed ways. These are three things to do to stay healthy all winter backed by science. We've got to move, we've gotta keep moving.

SHAWN STEVENSON: It's something that our genes expect us to do, and another aspect of this or reason why is that our lymph system relies on the pumping action of movement and deep breathing to help it transport toxins and metabolic waste, and our immune cells can capture certain things and neutralize certain things, but to expel them from our bodies, it's so important. Having healthy function of our lymphatic system. A study published in the journal Sports Medicine cites that, during Steady-state exercise in humans just walking lymph flow has been shown to increase to levels approximately two to three fold higher than when we are sedentary. Our lymphatic system is really our extracellular waste management system. A huge site of a lot of immune system activity. And it does not move unless we move. Our lymphatic system does not have a glorified pump, that's why it does not move unless we move.

SHAWN STEVENSON: And a study conducted at Appalachian State University found that walking caused short-term boost in immune parameters, most notably for Neutrophils and natural killer cell blood counts. Move, keep moving. That's number three on our list of three things to stay healthy during the winter, whether it's making our way to a locational facility, if the weather is being unaccommodating and taking a yoga class or doing some strength training or finding a way you could find an indoor track or go walk at the mile. There's different ways. Just be creative, find ways, plan them when things aren't lining up how you want them to be so that we get in a situation where we're not giving our body those movement inputs. Now this is also potentially time for us to slow down a little bit, right? But this does not mean that we are getting on bear status, all right?

SHAWN STEVENSON: Because we are not bears, we are not, in fact Winnie the Pooh. We are humans. We do not hibernate. We need these movement inputs. So don't let anything stop you this winter. Keep moving. If something gets in your way, say "Move, get out the way. Get out the way". Don't let anything stop you from getting in those movement inputs. Now, something that goes hand in hand with exercise, by the way, if we're still, this is still an



opportunity to lose a little fat, to lose a little body fat. The American Journal of Clinical Nutrition found that study participants who were given green tea extract before exercise burned 17% more fat than those who did not. The researchers noted a greater improvement in insulin sensitivity as well. And this highlights how green tea and exercise go hand in hand.

SHAWN STEVENSON: Now it's well documented that green tea has a huge benefit for our metabolic health, but what makes green tea so special is that it improves our immune system health as well, even dramatically reducing the risk of various cancers, which one of the hallmarks of cancer is dysfunction of the immune system. And a study published in the journal, breast Cancer Research and Treatment found that women who drank the most green tea had an approximately 20% to 30% lower risk of developing breast cancer. A meta-analysis of 29 studies published in the peer-reviewed journal, Oncotarget found that people who drink green tea daily were around 42% less likely to develop colorectal cancer.

SHAWN STEVENSON: Now this is something very simple that we can do and we can also do this together, have some tea together, but one of the most storied and densest sources of something called L-Theanine, that shows up in benefiting our cognitive function and also these other phytonutrients that help again to support our immune system, to improve our metabolic health. This form of green tea is called Matcha Green Tea. And what I drink is called Sun Goddess Matcha Green Tea from Pique Life. Go to piquelife.com/shawn right now, and you're gonna get the first matcha that's quadruple toxin screen for purity. No added preservatives, sugar, artificial sweeteners, none of that nonsense, just the highest quality Matcha green tea in the world.

SHAWN STEVENSON: It is crafted by a Japanese Tea master and there are less than 15 in the world. It's shaded 35% longer for extra L-Theanine to support our cognitive function. And right now, when you go to piquelife.com/shawn, you're gonna get free shipping up to 15% off their tea bundles and a 90 day money back guarantee. Go to piquelife.com/shawn, that's P-I-Q-U-E-L-I-F-E.com/S-H-A-W-N to get hooked up with all these incredible bonuses. Again, 90 day satisfaction guarantee, all right? Nothing to lose better health to gain, more improvement in support of our immune system, our metabolic health, cognitive function, and more. Check them out. Sun Goddess Matcha Green Tea is one of my favorites. You can make yourself a macha latte. This is something again to enjoy with friends and family and we can do this all getting healthier together.

SHAWN STEVENSON: I hope that you enjoy these three things to stay healthy all winter, most importantly is taking action. Knowledge is not power in and of itself. Knowledge is potential power. When we apply what we learn, that's when we truly activate that power. We've got some incredible masterclasses and world-class guests coming your way very, very soon. So make sure to stay tuned. Stay healthy all winter. 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 can 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 and powering great content to help you transform your life. Thanks for tuning in.

