THE MODEL HEALTH SHOW

EPISODE 950

5 Ways Your Air Quality is Impacting Your Health

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SHAWN STEVENSON: Welcome to the Model Health Show. I'm about to share with you four ways that your air quality is impacting your health right at this very second. Number one is that your air quality is affecting your cognition. A 2023 study published in Management science revealed that poor air quality can literally make you dumber. The analysis revealed that as the particulate matter builds up in your environment, like what happens in most homes and businesses over the course of the day, your cognition is reduced, decision making ability suffers, and you are far more likely to make errors in your judgment.

To do this, the study investigated how indoor air quality affects the quality of strategic decision making during high level chess tournaments smarty pants. The researchers utilized air quality monitors inside the tournament room and found that if the levels of fine particulate matter in the room goes up by just 10 micrograms per cubic meter, then the chance that someone playing a game will make a wrong move jumps up by roughly 26%. Now here's what's alarming. An increase of 10 micrograms per cubic meter is not uncommon at all for most offices, schools, and other places where humans congregate, especially those that are frequently closed off to outside airflow with subpar ventilation or poor air filtration. Now this study notes that even short-term exposure to poor air quality can result in higher levels of neuroinflammation, brain inflammation and brain oxidative stress.

Okay, this is, we gotta wake up to this. We have to realize this, and this is part of the reason why over time, poor air quality is even connected to higher rates of Alzheimer's and dementia. So that's number one. Number two, your air quality is impacting your sleep quality. A fascinating study published in the journal sleep took individuals with suboptimal sleep and place them into an eight week study to see if improving their air quality in their bedroom at night can improve their sleep quality. During the first four weeks of the study, scientists track their sleep quality without any interventions, just a regular old bedroom. Then during the next four weeks, the researchers have participants utilize air purifiers in their bedroom and monitored if it made any notable difference on their sleep quality at night. At the end of the study, the scientists and the study participants were shocked at the results. When participants utilize an air purifier in their bedrooms at night, it helped participants to fall asleep faster, go through their sleep cycles more efficiently, wake up less often at night,

spend more time actually asleep when they were in bed, and they were waking up feeling more refreshed each day.

Number three, your air quality is affecting your energy. A study conducted by scientists at the University of Alabama followed 58 women with chronic pain and fatigue to analyze if the weather and air quality in their area impacted their symptoms. At the end of the two month study, the researchers shockingly found that quote, greater fatigue was associated with more particulates in the environment. They also found a significant relationship between poor air quality, elevated particulate matter, and higher levels of physical pain as well. Crazy pants. Another fascinating study published in the Journal of Scientific Reports analyzed the potential impact that air quality had on the energy and emotional state of teenagers using objective measurements of air quality. The scientists found that the kids had higher levels of fatigue and more emotional distress when the air quality in the environment went down. And that leads us to number four, your air quality is affecting your mental health. A report from Harvard School of Public Health detailed how poor air quality is significantly associated with higher rates of depression and anxiety.

In particular, the report references a study from environmental health perspectives showing that as particular matter in the environment goes up, so too do the symptoms of anxiety and depression. The researchers also note that quote, particulate matter is among the most prevalent sources of environmentally induced inflammation and oxidative stress, unquote. And by using neuroimaging, scientists have affirmed that poor air quality can create structural and functional alterations in our brains. The air that we're breathing can literally change the physical structure of our brain, let alone the functional aspects of our brains. And all of this should make complete sense.

I know that at first I was oblivious to this. I was oblivious. Because our air quality was like, we're fish swimming in water. Like we don't know that we're in water until we're out of that bed, until we're pulled outta the water. Right? The same thing goes for us. We're swimming around in all this good air, and so we don't realize the impact and how. This exchange, this interaction with air being our number one nutrient for function and survival, we take it for granted and we don't understand the impact. And we spend so much time in our culture

today debating about diet and exercise. And obviously those things matter, but the quality of the air that we breathe can make or break our health faster than anything else.

And right now it's time to learn to understand and to utilize this incredible science and the truth about our indoor air quality. And how to improve it. With simple science-backed solutions starting right now. When we conjure up images of air quality, it's usually something we relate to air outside, but according to the American Lung Association, indoor air can be two to five times, even up to 100 times more polluted than outdoor air. And unlike our ancestors, Americans now spend upwards of 90% of our time indoors in addition to the usual suspects that are found in our outdoor air quality. Indoor air is frequently higher in volatile compounds from our stoves and indoor heating, as well as volatile organic compounds aKA VOCs from cleaning products, offgassing furniture, and more.

Now one key component to measure our air quality is through airborne debris at PM 2.5. Now, what does that mean? PM stands for particulate matter and 2.5 refers to partic, sorry, particulate matter. 2.5 refers to particles 2.5 microns or smaller. And according to Harvard researchers, this size matters because these small particles can reach the deepest parts of our lungs cause a local and systemic inflammation and oxidative stress. They find their way to our brain through the olfactory nerve and can enter brain tissue directly. Now, unlike outdoor environments that have several tiers of natural airflow, indoor environments can trap these particles leading to increased concentrations compared to outdoor air. In fact, when outdoor debris makes its way into your home or office or school, whatever the case might be. Where there's poor air flow, it has nowhere to go except to settle onto the surfaces of everything in the environment and onto the floor only to repeatedly be stirred up into the air that we breathe.

Now again, we think that the outdoor pollution particular matters or what's getting its way into our homes, and yes, that is part of the case and kind of being trapped in that environment, but a huge percentage of the particular matter causing problems indoors is not the stuff that's coming from outside. It's the volatile organic compounds, the VOCs and the gases being built up through heating and cooking in our homes that can make our indoor air so much more dangerous. Now let's break down a little bit more about these volatile organic

compounds. Volatile meaning that they are quickly capable of becoming vaporized and inhaled quickly. Volatile organic compounds are one of the things that are getting a lot more study and discussion in the realm of science and healthcare.

Many household items leach and spread volatile organic compounds such as Now, okay, this is gonna get a little crazy, but just bear with me. Alright? We're not trying to get scared straight, we're just trying to be educated 'cause we're gonna talk about. Plenty of solutions in good times. All right? But we need to know this stuff. All right? You know, all those Amazon packages we're getting, we're shipping, we're online buying these clothes, opening up these packages, new clothes, curtains, rugs, flooring, upholstery, furniture. All of these things are kicking off volatile organic compounds. They're offgassing, especially in the domain of things like furniture and our mattresses and our rugs and flooring.

Over time, we're just continuously offgassing. This is well established. This is not a scare tactic. It's to be aware of what's happening in our environment. With all of these artificial, newly created human entities lining our homes from floor to ceiling, wall to wall, window to window, to the window to the wall, we are being inundated with all of these newly invented chemicals. In addition, fuels, solvents, adhesive paints, cleaning supplies, deodorizers, aerosols, and personal care products. In today's modern home, and this is the key, if you don't have a filter, your body becomes the filter. Your lungs, your bloodstream, your brain becomes the filter for so many of these compounds that we are constantly breathing in our environment and we're just completely unaware.

And the question today is this posing a harm to our health and our family's health? And I'm here today to share the science with you. And again, we're gonna focus on so many different levels of solutions and just making the air more, more vibrant and healthy and health affirming. We're trying to breathe again, like Tony Braxton. All right. We're trying to breathe again. We're trying. We're trying to breathe in, breathe out. We're trying to do all that in a much healthier way. So let's look at some other ways that our air quality is possibly impacting our health. Just to get an overall, again, understanding at the multiple layers that most people need to know about.

SHAWN STEVENSON: I got a question for you. Can the air you breathe affect your body weight? Now, I know this sounds crazy, like air doesn't have any calories. I could eat air all, eat all the air all day. I'm not gonna gain any weight from that. Well, a shocking study titled, exposure to Air Pollution and Gains in Body Weight and waist circumference among middle aged and older adults was recently published in the Journal Science of the Total Environment. The study tracked the air quality changes, weight changes, and waste measurement changes of nearly 14,000 people from 2011 to 2015. And after compiling all the data, the scientist stated quote, "we found positively robust associations of later life, exposure to air pollutants with gains in weight and waste circumference." Howsway. Crazy what air quality affecting our waste measurement affecting our body weight. How? How? This is insane. Now, keep in mind, of course, this is a correlation. It could be that the poor air quality simply makes people less inclined to get up and exercise, or less motivated to make healthy food choices.

But again, there's something about the air itself, as the researcher stated, the association is robust. It's not just an association, it's a robust association. Now, here are some of the signs, affirmed reasons why the air itself can influence weight gain and metabolism. Number one, inflammation. Air pollutants can cause internal inflammation, which can disrupt the hormones that regulate appetite and lead to overeating. We've already mentioned multiple studies finding how our air quality can increase inflammation in our bodies. And with that, number two is our hormone function itself. Air pollutants can affect hormone function, including insulin. This is seen in peer reviewed studies that the air that you're breathing can affect how insulin is working in your body.

This is nuts. But then again, we associate, we're so superficial, we just associate the food with affecting our insulin. That food does not exist without the air, without all of the chemistry. That is found in the air and that is what's integrated into just layers and layers of what's happening with the soil layers and layers of human physiology. There's so much more to us than what we see. You know, recently there was a lot of data and headlines around the human body being mostly empty space, right? But more recently we have affirmed that there are essentially these electron clouds of probability that make us up. All right? And if we think about clouds, again, we're probably conjuring up images of air.

SHAWN STEVENSON: And so we only see things at a certain degree or spectrum of reality. Alright, there's so much more that we can't see, don't remotely understand. And this is the domain that we're looking into because all this superficial stuff can get us into trouble. We start to see things in this very black and white, seeing his believing. And I'm a seeing his believing type of guy. That's kind of like my, my, there's, you know, of course there's nature of nurture, but that's kind of, I just feel is my nature. I feel like I've been like this since I was a little shorty since I was a little one. Okay. Seeings believing for me and so understanding this information really helped to open my eyes and my heart and my intuition and start to remember and appreciate that so much of my existence is based on what I cannot see now.

I hope that hits you on multiple levels because it definitely hits me on multiple levels. And so moving on another aspect with this weight gain association with the air quality vitamin D deficiency. Air pollution can reduce the body's ability to synthesize Vitamin D from sunlight. And a deficiency in vitamin D has been linked to obesity in numerous, numerous studies. All right, what are they spraying? All right, we're not gonna crack it. What are they spraying? People have been saying it for years. Got some new stuff coming out. All right. The articles up there. But we're not even going to drive into, you know, into that domain. But, you know, just keeping in mind that even from the ground level and how things are elevated into the atmosphere, it's well established.

For example, that business that's being done, pollution, debris, the result of manufacturing on the other side of the planet. What's going on and being produced from a factory in Japan is affecting the air quality here in the United States and vice versa. No matter where we are on this globe, the practices, the industrial practices are affecting everything everywhere. Okay? We're sharing all of this. We're here in this glorified snow globe, sharing this air. We're sharing it. All right, and so it's just being more respectful of that and the things that we're doing is definitely affecting the air quality and the ability for just that natural interaction for the sun to do all the good stuff for us.

In addition to that, in association with the air quality and weight gain, waist measurement gain, we see the impact on overall metabolic function with particular matter being found to be able to interfere with metabolic functions and the body's ability to absorb oxygen

efficiently. Alright, because if we think about this process of burning fat, we're talking about this oxidative reaction. Oxygen has to be there, and B. We have to have healthy receptor sites and we have to have just a clean running system for this stuff to happen efficiently. And so that's what this is about. It's about education, it's about empowerment. And I wanna share this with you as well, because this is, especially, it's a big reason why I decided to do this topic is because of what I'm about to share with you right now, and it's the impact that it's having on our children.

Children are especially susceptible to these metabolic changes from poor air quality. A brand new study published just this year titled Childhood Exposure to Air Pollution, body Mass Index Trajectories and Insulin Resistance among Young Adults was conducted by scientists at USC. The scientists specifically looked at traffic related air pollution and found that children who were exposed to higher levels of traffic related air pollution tended to have higher BMI by the age of 13 and experienced rapid weight gain from adolescents to young adulthood.

This in turn, was linked to higher levels of insulin resistance in their mid twenties. Alright, now again. Is this causative? Is that air pollution causing them to increase their weight so much faster to develop insulin resistance faster? We cannot say that it causes it, but we definitely know there's a strong, robust, robust connection. Because again, we have to stop looking at things superficially and understand that the air that we breathe is the number one nutrient that's controlling our metabolic processes. It's not just you are what you eat, it's you are what you drink, you are what you breathe, you are what you think. Our thoughts change our chemistry in our bodies instantaneously.

Our thoughts change our physical body. We've got to get scientifically mature and grow up from these superficial, small-minded ideas that is just this, like calories in calories out, just cut the macro. Alright. All that stuff is fine and dandy, right? It has a small part to play for us to micromanage these small things, but even within that chemistry of the calories, it is so much more complex than most people realize. It's based on a science that is incredibly fluid. Measuring a calorie is not like measuring a foot. The calorie in a food can be dramatically different from what shows up on a label. Let alone where it's grown, let alone how your body

processes and associates with that food. A study that I cited numerous times that was published in one of my books that I wrote.

It was right on 20 18, 20 19 when I was actually working on this book and came across this study, published in the journal Food and Nutrition Research, looked at ultra processed sandwich versus whole food version of the sandwich. I'm just gonna give you the condensed version. White bread and cheese product, which would be something similar to Kraft slices. All right. Craft singles, they can't call it cheese because there's not enough cheese in the cheese. And then cheddar cheese versus cheddar cheese versus whole grain bread. Subjects eat these. They track their calorie burn after eating these sandwiches. How they do it, how they track the calorie burn, Shawn, they tracked it by the air.

They're breathing out. That's how they tracked the release of the calories. You burn off or release most of the weight that you lose through your breath into the air. Your fat breath, fat breather. All right? And then other people around, you gotta breathe your fat air. Sorry. But this is so complex and beautiful and amazing, like what happens when it's released into the air. We are sharing all of this stuff. This doesn't mean, could this be part of the reason why the air quality and weight gain, maybe you grabbing somebody else's weight when you breathe it in? I don't know. That's getting into that realm again of like quantum farfetched craziness, but who knows? But the bottom line is the researchers found that when people ate an ultra processed version of that sandwich, they burned 50% less calories post meal.

Eating that ultra processed food gummed up this process of metabolism. And so calories in, calories out is just so small minded. And I got, I went to a conventional university. I took a nutritional science class, big auditorium. I was teaching this dogma. Dogma, okay. I understand it inside and out and I respect it, but it is only a small part of the story because we are so much greater. We are so much more complex and wonderful, and the conditions that we are now living in that are, that are biology is existing it at this current time is making it a lot harder for us to express radiant health. For us to express what we would consider to be optimal function, or we see health as the lack of disease.

SHAWN STEVENSON: We see health as the absence of some kind of disease or dysfunction. Alright, so yes, that part too, but also like really feeling good and living our purpose and enjoying this life. And so with that being said and understanding this role that our air quality is playing in the lives of our children. Children are especially vulnerable as their brains are still developing to the impact of poor air quality.

Multiple studies including a 2023 study published in The Journal of Effective Disorders, affirmed that when exposed to poor air quality, children and adolescents are at elevated risk. Bipolar disorders, schizophrenia, personality disorder, major depression affective disorders, and this is tricky to even say on social platforms, but not wanting to be here anymore. We'll put it like that. Multiple studies have also found that poor indoor air quality in particular. Higher levels of particulate matter is associated with lower cognitive test performance and children exposed to poor indoor air quality in schools, perform worse on math and reading comprehension tests.

I can go on and on and on and on and on to the break of dawn when it comes to this. But just to summary here. Additionally, numerous studies have affirmed that poor air quality and particulate matter buildup leads to higher rates of allergies, asthma, A DHD and more. We cannot change it if we're not aware. We cannot change it if the education is not there. We can absolutely create an environment where better air filtration in schools and having a high quality air purifier in every classroom is the norm, but again, the education needs to be there. So let's dig in and let's talk about some solutions. And we're gonna start with simply opening a window, simply opening a window or two, especially to create some better airflow.

And we're gonna address like, what if it's cold outside? What if it's too hot? Opening a window because again, if we're looking at indoor air quality versus outdoor air quality, two to five times up to 100 times worse air quality indoors than the air quality outdoors for the average home. Now, a great example of this is what's seen when we are in a closed off environment when we're attempting to get a good night's sleep. In our modern bedrooms, we tend to close ourselves off tightly from nature, under the guise of privacy and shutting ourselves out from possible disturbances. Of course, we can box ourselves in by closing doors and windows,

and we seal ourselves in this closed off space, and it can be like laying down comfortably in a Tupperware container and then placing the lid tightly on.

That's how sometimes our bedrooms can be in our modern society without adequate airflow, the carbon dioxide levels in your bedroom will inherently raise much higher. Now, CO2 is something that I've been measuring like adamantly. I've got a CO2 monitor in my kitchen and in my bedroom, and I'm checking on that multiple times throughout the day, and we'll talk more about that. But just know that without adequate airflow, the carbon dioxide levels in your bedroom will inherently raise much higher. And as research conducted by scientists at the Technical University of Denmark demonstrates. This rise in CO2 diminishes sleep quality and reduces cognitive performance the next day.

Now let me break this all the way down for you. Their randomized blinded crossover study published in 2015 had students experience different airflow conditions in their dorm rooms. In one segment of the multi-week study, the students slept with an open window or a closed window and tracked their outcomes. In another phase of the study, the students slept in conditions with the windows closed, but had ventilation switched on or off, using an inaudible outdoor air supply fan that was turned on automatically whenever the CO2 concentrations increased above 900 parts per million. Their results were measured against another condition in which the student slept with the ventilation fan off all night.

This was dubbed the low ventilation condition. Now, here's what the researchers discovered in the open windowed condition. The levels of CO2 were at 660 parts per million. That's pretty good, but the closed window condition and the low ventilation condition, the CO2 concentration in their bedrooms was approximately 2,585 parts per million. The air exchange rate was 10 times greater with the window open. In the fan ventilation experiment, the average CO2 concentration in each room while the participants were asleep was 2,460 parts per million without ventilation, and 865 parts per million with ventilation. The air exchange rate was approximately five times greater with the outdoor ventilation fan.

Now the question is how did this variation in CO2 levels affect the sleep of these students in the initial closed window versus open window experiment? Sleep latency, meaning they fell

asleep faster, improved significantly when the window was open. Now sleep efficiency was also improved with the open window condition. Though this was not statistically significant, but it was notable. Now here's what's fascinating. The ventilation fan on versus off study. Sleep efficiency was significantly better when the fan was in operation. Alright, so we do see statistically significant results. Specifically the researchers reported that test subjects spent a greater percentage of their time actually asleep and going through those sleep cycles when they were in bed.

The researchers noted that when bedroom air quality was improved in these experiments, "subjects felt better the next day, less sleepy and more able to concentrate and subjects performance on a test of logical thinking improved." This is the power of merely opening up a window and letting in more air flow to the best of our abilities. Now, of course, it's super easy to do on a nice day, but if there are just moments of the day, if it's one of those seasons where it's hot outside, maybe you can open your windows and let in some fresh air, let out some of the particular matter build up, let everything just kind of airflow go through the house in the early part of the day, or maybe in the evening.

Find a way to make it work. Same thing when it's cold outside. If you could just open up the windows for a little bit, let in some fresh air, right? That's, it's so crazy. We have that term fresh air, right? We know when things get stuffy and get stale, but many people are shocked to find that their energy, higher amounts and severity of headaches coming on and other abnormal things once they get a CO2 monitor. They find out like, oh, these symptoms show up, when CO2 levels are getting extendedly high in my environment. If you're curious about what optimal or average CO2 levels are, we're gonna get to that in a minute. But again, opening a window is remarkable, but also just improving circulation in the environment also is pretty helpful.

As a matter of fact, researchers at UC Berkeley found that a simple desk fan could reduce the CO2 concentration levels in the air in a small, in a small but notable way. Now again, I've been adamant about checking CO2 levels in my house. Now again, not obsessive but adamant and it's just about getting air education, and you can get a simple CO2 monitor from Amazon. They're all pretty comparable. And again, when I first got one, I was shocked at how high CO2

levels would. Rise while cooking, especially when using the stove. And just a reminder to open up a window and or turning on the fan for the oven. Now with that being said, this is another strategy in particular with cooking, is utilizing the fan that a lot of stoves, ovens have over top.

But the rub here is paying attention to what toxicologist Dr. Yvonne Burkhart shared right here on the Model Health Show. You wanna make sure that oven fan is actually ventilating and sending the fumes in the particular matter outside of your home because crazy enough, some designs of certain, you know, houses and apartments can have that air just going into another part of your house. Crazy. All right, so just making sure that it actually is going outside, but even with cooking and utilizing gas for heat in our homes. According to scientists at the State University of New York, actually the most common contributor to elevated CO2 levels indoors is you. It's you. It's us. It's people.

Indoor, CO2 is primarily generated by people simply breathing. All right, breathe in oxygen. Breathe out CO2. And in a closed room with poor circulation, CO2 can accumulate rapidly, often reaching levels that impact health and cognition according to their study publishing environmental health perspectives. Outdoor CO2 levels usually hover around 400 to 420 parts per million, but CO2 levels in a typical office or classroom or home can easily exceed 1000 parts per million in less than 45 minutes if windows are closed and hVAC systems are off or poorly designed. Around 1000 parts per million is where cognitive impairment can happen in some people who are more sensitive, but indoors without fresh air exchange levels can rise 2000 to 3000 parts per million in crowded spaces, enough to cause drowsiness, headaches, and measurable cognitive decline.

So open a window at least occasionally through the day. Make it a habit. Get a fan going. You know, ceiling fans are great if you have 'em. Just desk fans, you know, simple fans as well can help with circulation. And again, just do what you can. We don't want to be obsessive or crazy about this stuff, but we want to be aware. Humans have not evolved to be in quote indoor spaces all the time. And now the average person spends about 90% of their time indoors. Tupperware environment, putting the lid over yourself.

SHAWN STEVENSON: All right? So we've got to get more exposure to that el natural, to that raw air. All right? You want to get that unprotected, you know, get that direct contact. Anyway, so moving on. Again, we're looking at things that are practical that we all can do, and a big part of improving the air quality in our homes, in our offices, in our schools, but in particular, we have the most power over our microenvironment in our homes. So that's where we're really focused. But let's be more cognizant of not increasing the levels of these volatile organic compounds in our homes to begin with in this partic matter that can build up as a result. So regular cleaning to reduce dusk accumulation in our homes and avoiding household products that release these volatile organic compounds can have a tremendous impact on improving the air quality for yourself and your family and your home.

So again all these conventional cleaning products. I grew up with them. Comet, comet, pinesol. There's no pine in that sol. All right. These are all just these crazy conglomerations of chemicals. There are far better products on the market today are detergents. You know, these various bleaching agents. All this stuff releases a ton. I mean, you would be. Your mind will be blown if we could actually see the amount of these volatile organic compounds that are released into our homes and often have no place to escape if we are just like, I gotta have my comet shine or I grew up with com, my mama used Comet.

I'm using Comet. Open the window at least. All right, let the room air out. But there are far better products. There are many DIY, do it yourself versions of cleaning products. There are many companies who are stepping up, providing. Far less toxic options as well for cleaning our homes. So let's be mindful of that when it comes to cleaning products. Don't bring it in and use 'em in the first place. Or if you do crack L windows open. For real. For real. Get the fans going. Let that stuff air out to the best of your ability. Also, basic stuff, you know, I know I come from a culture, we like to smell goods. All right.

We're very, we're serious about that. We're serious. Don't be funky. Don't have your house stinking. And so what we do, we got high use of the febreezes, of the sprays. We got the plugins, we got the scented candles. All right. So all of that stuff is crazy. And just to refer back to Dr. Yvonne Burkhart's interview here on the Model Health Show, which would be a great episode for you to check out after this one. She's a board certified toxicologist who

worked in the flavors and fragrances industry. She knows where the bodies are buried. She knows the nasty stuff that they're using, and she's just like, listen, we're talking heart disease, cancer, cognitive decline, dementia. We're talking all manner of disease and dysfunction as a result of these newly invented chemicals.

If you smell it, it's in your body, it's in your brain, it's in your bloodstream, all right? And it is what it is. Personal care products, hair sprays, anything that's the aerosol version of things. Hair sprays, deodorant, sprays, perfumes, our colognes. All right. Many people have so many things that they're spraying into the air. It smells like you're walking through the Macy's section with the, when you walk into their home. All right. Hey, if you wanna try some, a. All right. All that stuff. Just chill. Let's chill. Okay. Now listen, if you're light, and I gotta have all my smell good, Shawn, I got my signature scent. Respect that. I respect that.

All right, but let's just, let's find a way to minimize a lot of the other stuff so we can just, you know, but it's just these, the bioaccumulation in our environment. That's the key. All right? If you love your spray on deodorant, have at it. But maybe let's. Get the, you know, the air fresheners out of the house like, let's not use that stuff. Let's use something else. Alright. So it's making these adjustments that work well for us. Now what about doing something to actually reduce that particulate matter buildup in our environment? We know that this particulate matter buildup is associated with neuroinflammation, with cognitive decline, with disruptions to our sleep quality.

As mentioned earlier to start off this episode, the study published in the journal Sleep where researchers utilize air purifiers in participants' bedrooms at night. Were shocked to see how participants fell asleep faster, how they went through their sleep cycles more efficiently. They woke up less often at night, and they spent more time actually asleep when they were in bed and subjectively. So they used objective sleep measurements and subjectively, people were waking up feeling more refreshed. And this is something that we can truly set and forget to improve the air quality dramatically in our environment. So whether this is for our cognition and performance, or whether this is for improving our sleep quality at night.

SHAWN STEVENSON: Now, this is something that I've been studying for years. I've tested and experimented and reviewed the data on multiple air purifiers and the air purifier that stood out far and away better than anything else. I mean, by far was a subject of another sleep study showing that when participants utilize this air purifier, they spend 18% more time in the deepest, most anabolic stages of sleep. They fell asleep on average, five minutes faster, and they spent about 25 more minutes actually asleep when they were in bed. Now this air purifier is a big part of my family's lives. I've got one in everybody's bedroom to make sure that we're benefiting. And again, this is something we can set and forget to improve our overall wellness.

And I can literally breathe easier knowing that it's there. The air purifier that I'm talking about is the Jaspr, and within about 30 to 45 minutes utilizing a Jaspr, our air is 95% cleaner. It filters 99% of particles down to 0.1 microns. It has a three stage filter and air scrubber technology, and it captures hazardous mold, bacteria, and viruses. And the cool thing is that it's whisper quiet and has a fantastic dimmer for us to, you know, turn off any bright lights in our sleep sanctuary. And one of my favorite things about it is that it has a lifetime warranty. Instead of our bodies dealing with this additional toxic load at night in our environment from particulate matter, dust, dander, microbes, and volatile organic compounds that are offgassing from our furniture carpets, even our mattress, the Jaspr cleans the air so that our bodies can stop playing defense and truly rest and recover.

I've utilized so many different random air purifiers and they're simply nowhere near as powerful and effective as Jaspr. You need to run about five or six run of the mill, $200 plus air purifiers running on their highest speed all the time to remotely match what just one Jaspr does. And all of those air purifiers would be noisy, creating a lot of clutter, and still not match the capabilities of Jaspr. And I'm so excited about this. Right now as of this recording, for a limited time for this very special Black Friday, cyber Monday time only, you are going to be able to get your Jasper for $400 off, just go to jaspr.co/model right now. That's J-A-S-P-R.co/model to take advantage. Again, Jasprs spelled a little differently and it's dot co.

So it's J-A-S-P-R. CO/model. Take advantage. This is something that is a game changer for not just the air quality in your environment, but air education because the feedback that I've

gotten from my Jaspr and these high level sensors like the Jaspr in my bedroom, is picking up when somebody's cooking downstairs and picking up. Trapping that particular matter, and it's like, it's the, it's the most amazing thing to know. Like I just wasn't aware that this was happening. And so again, this is for a very limited time, so please take advantage. This is a great gift to give yourself. If you're thinking about holidays like. Real beneficial gift giving as well.

A Jaspr would be a great gift to give for the holidays. I'm one of those people that it's probably a little bit difficult to gimme a gift 'cause I don't really want nothing. All right? But something like this that can improve my health and wellness, so I could set and forget, like I could just add to my environment to improve things, speaks to me deeply. And so this is one of my favorite gifts to give as well. Again, this is very limited time. Head over there, check them out. jaspr.co/model. So we've covered everything from simply opening some windows and letting in some quote fresh air and helping with that airflow to utilizing some simple fans in our environment to doing our best to reduce.

The volatile organic compounds that we're utilizing in the environment itself. And also, of course, utilizing a science-backed air purifier to capture those things, to grab hold of a great amount of the particulate matter. And by the way, when I changed out my filter in my Jaspr, I was shocked. I was shocked because it's like that stuff could have been in my lungs and in my blood, and you just never think about it.

And our bodies do a great job of handling this stuff, but to what degree? How do we know how much this stuff is impacting us? And by the way, we spend about one third of our lives in our bedrooms. So that would be the great space to have a science backed air purifier, if anywhere. And then during the day, you could, you know, open the windows and all the fancy things. Or again, if you are able to do that in the environment that you're in, to have a window cracked open or some means of letting in some airflow, or at least having a fan just to move the air around a little bit. Great idea. Again, we want to do our best to have ventilation as affirmed in multiple studies.

And so with that being said, what are some other simple science back things we could do? Another thing we could do is to get some house plants. All right? Certain plants have been shown in multiple studies to do things like reduce CO2 levels and improve air quality. Take the English ivy, for example. NASA listed it as the number one air filtering houseplant. It has an unmatched ability to absorb formaldehyde, which is a known neurotoxin, of course, which most of us are exposed to in our highly industrialized world today. It's incredibly easy to grow and it's adaptable, and you can use it as a hanging or a floor plant, so it's versatile and it requires moderate temperatures, medium sunlight.

Another great plant for your sleep sanctuary. This is what I have in my bedroom right now. I've got two of them. Both sides of the bed is the perennial snake plant. It doesn't require much light or water. Matter of fact, we got 'em right here at the studio. All right, we have our snake plants. It doesn't require much light or water to thrive. They're incredibly robust. What's most impressive is that it absorbs carbon dioxide and releases oxygen efficiently, both during the day and at night. While most notable plants do this more efficiently during the day, so it's a perfect plant to keep in your bedroom for an air quality boost. Multiple studies, including one published in the International Journal of Plant Biology and Research in 2017 found that the resilient low maintenance snake plant outperforms other house plants in its oxygen releasing potential.

Pretty cool. Pretty cool. So bringing a little bit of the outdoors inside. Alright, can be very helpful. We tend to do this stuff the opposite way, of course. Like especially during the holiday season, we bring our lights outside and we bring the tree inside. All right? But can we normalize having a little bit of nature in our homes as well on a consistent basis? And of course, basics like replacing your hvac, right? Heating, ventilation, and air conditioning filter every season. I know some people, myself included, I probably went like two years when this was like on me to change my HVAC filter. This is something we should be changing every season, ideally, at least twice a year.

All right? That's gonna help with some overall. According to the data that we have, it doesn't make a huge difference, but it does make a difference. Alright, so changing out, replacing our HVAC filter every season. Ideally at least twice a year, but every season will definitely help.

SHAWN STEVENSON: Another thing that we can consider doing is get our air ducts professionally cleaned, especially during the winter months. Now it's just a basic maintenance. It depends on how our apartment or home is kind of wired up, but this is something that maybe we can do ourselves to a small degree, but maybe professional cleaning, maybe something we could get done annually. So these are all simple things that we can do to improve the air quality in our homes.

And I just wanna reiterate how important this is for us to utilize this information in our microenvironments that we can control ourselves, which is. Within our own homes, improve the air quality for ourselves and our loved ones. I'm telling you, you're gonna notice a difference when you are aware of this stuff, when you are mindful of the CO2 levels. When you have a science-backed air purifier, I'm, I can't even tell you how many times. Less headaches, more energy, less fatigue, just the basic stuff. Better focus, not to mention all of the science that we covered relating. Poor air quality to higher rates of abnormal sleep, to higher rates of asthma and allergies, and cognitive decline and poor sleep quality, and even the potential to affect our metabolic health.

The list goes on, and on, and on. There really isn't anything more impactful on our reality than the air that we breathe. Now, obviously there's degrees of this and so it's being mindful of the air that exists, like in our micro environment as well. But you know, for many people that live in bustling cities, especially in places like in particular, and where some of this research that we cover is coming out of California in particular in the Los Angeles area. We know it's known for the pollution, but what about the wildfires and things of that nature that can dramatically impact the air quality? I'd rather be prepared 'cause I was not prepared at first, and this is what inspired me to make this upgrade and stop tinkering with these low quality run of the mill air purifiers and utilize the Jaspr was a result of one of these California wildfire outbreaks.

And now when we say wildfire, that's a misnomer because it's really a chemical fire. A lot of the stuff that was destroyed and broken down by these fires were manmade, you know, buildings and cars and fuels and all this other kind of stuff that is made its way integrated into our environment. And so this is one of those things that stack conditions in your favor, and I hope that you got a lot of value out of this. If you did, please share your voice. You can

leave a comment below if you're watching on YouTube or on Spotify. We have Spotify video now as well, so you could leave a comment, share your voice.

What was your biggest aha moment? What thing really resonated with you? What thing jumped out? What thing was just crazy that you learned about today? What is your experience? What are some of the things that maybe you've done to think about and to improve your air quality over the years? Share your experience. I really do appreciate that and I love to see that engagement is super helpful for other people as well. And most importantly, this is about application, alright? Knowledge is not power. It's potential power. So taking what you've learned today and put something into practice. Many of these things are very simple, but this is how we make change.

Start stacking conditions in your favor. That's what it's all about. I appreciate you so much for tuning into this episode today. We've got some amazing epic master classes and world leading guests coming your way very, very soon. So make sure to stay tuned. Take care, have an amazing day, and I'll talk with you soon.