



**Episode 381: How to Protect Indoor Air Quality
From Viruses, Contaminants and Smoke
With Peter Spiegel of AirDoctor**

Child: Welcome to my Mommy's podcast.

This episode is brought to you by Gladskin, an incredible new product and resource for anyone who is struggling with eczema. This product is rooted in a really unique scientific understanding of the skin's microbiome. Gladskin has unearthed an innovative new way to solve eczema that helps to treat the root and not just the symptom. It's a new category of non-prescription eczema treatment rooted in endolysin science and has received recognition from today's leading dermatologists and pediatricians. While most microbiome studies have focused on the health implications of what's found deep in the gut, we're now finding that healthy skin, just like a healthy gut, requires a balance of bacteria. In fact, four out of five people with eczema have a specific type of imbalance in their skin bacteria or their skin microbiome. And this is where Gladskin comes in. When the skin balance bacteria gets out of balance, eczema is more likely to flare. So a targeted approach to that takes into account the microbiome's good and bad bacteria is critical to relieving the redness and itching of eczema. Although new and unique in its approach in the U.S., this has already been a proven solution for eczema in Europe for five years and received recognition from leading dermatologists and pediatricians. It's also been accepted by the National Eczema Association and is a different approach altogether compared to steroid creams and traditional over the counter moisturizers. The best part of Gladskin is hypoallergenic and free of steroids, fragrances, drying alcohols, and harmful preservatives. It's stored fresh in a pharmaceutical quality bottle so they don't need to use the chemical preservatives found in most over the counter creams and lotions. I hear from a lot of you whose children have eczema, and I'm so excited to get to share this resource. You can find out more and get an automatic 10% discount by going to wellnessmama.com/go/gladskin. To get a 10% discount, it should be automatic, but you can also use the code WellnessMama10 if you have any trouble.

This episode is brought to you by Joovv Red Light Therapy that I have talked about for a really long time, and that is a regular part of my daily routine. I wanted to make sure to talk a little bit more about them today. You've heard me talk about red light therapy before because it is part of my daily routine. I feel like this is an extremely effective health modality. And it's something that I make a priority all of the time. It's been wonderful for my skin and my thyroid, also my energy levels. And I've written on my blog quite a bit about the many health benefits of red light therapy. I found more and more in the research that light is such an essential part of health. We think about nutrition and sleep, and a lot of the other aspects of health, but we often forget just how drastically important light is to our health. And red light therapy is one of the important types of light that we often don't get enough of. Many of us are exposed to all kinds of artificial blue lights in our homes, but we don't get enough of spectrums like red light and like all of the spectrums that come from the sun every day. And the way that I remedy this is totally inexpensive way of spending time outside every morning in the natural sunlight, and also using red light therapy daily. Anyone who's dabbled in red light therapy has probably heard of Joovv because they are the leading brand. They have pioneered this technology, and it's the light that I've had in my home for many years. Joovv is just now launching their next generation of devices and they made upgrades to what was already incredible red light therapy systems. Their new devices are sleeker, up to 25% lighter, and with all the same power and intensity that we've come to expect from them. But with their new intensified version, you can stand as much as three times further away and still get the recommended dose. They've also upgraded the setup so it's very quick and easy to mount, and set up, and can fit in just

about any space depending on what size you need. And they have a cool new feature like recovery plus mode, which uses pulsing technology to give yourself an extra boost to recover from a tough workout or a tough day with the family. Also, as a busy mom, I need all the sleep I can get. And I find that using a red light device at night helps to wind me down from the day. But now they have something called Ambient Mode for calming lower intensity light at night, which I mentioned avoiding blue light at night to help your body and your natural circadian rhythms. And adding in soothing spectrums of red light can also be really, really helpful. So, definitely check it out. Exciting news, for a limited time, Joovv is going to hook you up with an exclusive discount on your first order, and you can find out all the details by going to joovv.com/wellnessmama and using my code Wellnessmama on your qualifying order.

Katie: Hello, and welcome to "The Wellness Mama Podcast." I'm Katie from wellnessmama.com and wellnesse.com. That's wellness with an E on the end, my new line of personal care products that you can check out at our website wellnesse.com.

This episode is a special episode that we wanted to get up quickly to you guys because it goes deep on the topic of air quality, specifically related to things like smoke and viruses. We are all dealing with a little bit more than usual, it seems like this year, and my heart goes out to any of you listening or reading who are in the path of these fires or getting smoke from the fires. And I've read a lot of data about smoke and how harmful it can be to our health, and obviously it's not something that's fun to breathe, and I've heard from a lot of you who are looking for solutions for this. So I wanted to have this episode available as quickly as possible because I wanted it to be solution-focused. And if you check out the show notes at wellnessmama.fm, it also includes an almost 50% discount on the best home air filter option that I have found. And I wanted to make sure it was... They're basically selling it to you guys at cost at this point. So I wanted to have that link available for you as well. I'm here with Peter Spiegel, who is an entrepreneur, and inventor, and wellness expert. And he's the developer of this air filter. He's done tons and tons of research on air quality. And they do a lot of third-party independent testing on their filter and purifier to make sure that it does what they claim it does. And he talks about how to identify if an air purifier is working or not, what you need to focus on to make sure that your air purifier is handling the viruses or bacteria or smoke in your environment, and a lot of other broader topics about how we can all improve our indoor air quality, which can be as much as 100 times more polluted than outdoor air. So very timely and fascinating episode. And without further ado, let's join Peter.

Katie: Peter, welcome to the podcast.

Peter: Well, thank you so much, Katie. I'm looking forward to doing this with you.

Katie: I'm excited to chat. I think it's a very timely conversation for multiple reasons, which we will definitely delve into in-depth. But, to start with, I would love to get your take on something that I often have read and have also myself quoted, that indoor air can often be much more polluted than outdoor air. So I would love your take on if that is true, and maybe some of the reasons why.

Peter: Yeah, sure. Well, thanks for asking that question. You know, when we go into our homes, we wanna feel safe in our homes, like, our home is our sanctuary. And, you know, when we walk in the house and close the door, you know, we may have this feeling, "Oh, I'm inside now and it may be polluted outside, but, you know, I'm safe indoors." But our own Environmental Protection Agency says on their website that indoor air can be up to 100 times more contaminated than outdoor air. So, you know, how can that be? Well, the first thing is, you know, even though we may have our window shut and our doors closed, our homes aren't a sealed system. So if we have central heat or central air conditioning, those systems are set up to bring in a significant portion of fresh air or polluted air, whatever the case may be, from the outdoors. So you're starting out by having a combination of constantly indoor air and recycled indoor air and outdoor air.

And even if you don't have central heating or air conditioning, our houses still aren't sealed, and doors open and close, and there's air coming in through various parts of the house. But then there's, you know, what are we doing inside of our homes? So, a lot of us have gas stoves, gas appliances, even if they're properly vented, a certain amount of gases get into our home environment. It depends how recently you painted your house. Very few of the house paints we use are no VOC volatile organic compounds.

So, contaminants can get into the air that way. Carpeting, laminate flooring, which is so popular, these are all outgas, chemicals, even formaldehyde, are all types of building materials, particle board, and furniture. Maybe we buy furniture that we assemble ourselves. It's all particle board now and it's glued together with chemicals that outgas into our homes. There's our personal care products that we use, and perfumes, and deodorants, and they have synthetic chemicals called phthalates that are hormone disruptors. And I could go on and on and on. But we're constantly adding things to our home environment without giving any thought to what that impact could be on our health. And that's how indoor air gets to be up to 100 times more polluted than outdoor air. And, sorry I took so long to get to that answer.

Katie: That's wild. So actually, that is an accurate statistic, that it can be up to 100 times more polluted than outdoor air. Obviously, there are some mitigating factors in some parts of the country right now that I'm sure might be leveling the playing field for the outdoor air but, in general, it can actually be up to 100 times more.

Peter: Yeah, it's so complicated, you know, the situation. I mean, we're taping, we're recording this conversation at a time, I'm in Los Angeles. There were very bad wildfires, you know, to our East, and if you're on the entire West Coast now, Northern California, Oregon, Washington, you know, we're really having problems with polluted outdoor air. And so, it's a real cocktail of contaminants in our homes and a really challenging situation.

Katie: Wow, okay. So I wanna definitely go deep on a couple those topics today, specifically, obviously, the things, like you mentioned, very timely right now. We're dealing with a couple of different potential contaminants in the air, and I'm gonna tackle them one at a time. So, the news right now is certainly like talking a lot about the fires in California, and they're devastating. And my heart goes out to anybody who's in the way of those, but, certainly, even people who are not in reach of the fires themselves. We're seeing these reports of horrible air quality in a whole lot of surrounding areas, actually, the whole large part of the country

right now. And this seems to be almost a yearly problem at this point, somewhat recurring. So, talk about some of the increased problems we're seeing when it comes to this increased smoke in the air and what that can look like for the human body to have, you know, that increased load that we're breathing.

Peter: Yeah, sure. I think it's well established now that smoke is not healthy for the human body. And really, that smoke could be created from, you know, tobacco products, and it can be created by a wood-burning stove that's not properly vented to the outside. And then, of course, you know, you have these wildfires. And when the wildfires burn, it creates ultra-fine smoke particles and they're commonly referred to as PM 2.5 particles. And that means particulate matter that's smaller than 2.5 microns. There's also the larger particulate matter, you know, over that size.

And if you use some of the popular weather apps or if you go online, you can actually search for the air quality index. And air quality index is comprised of basically two things, particulate matter and then gases that are in the air or ozone. So fires increases particulate matter. And the EPA considers the particulate matter or the air quality index being under 50 as a safe level. And then 50 to 100, it's starting to get unsafe for people, you know, with different kinds of health problems, breathing problems. And then once it goes over 100, it's really unsafe for anyone. So if you look at the air quality index right now up in Oregon, it's over 300, right? It's really unhealthy air. And even where I live in Los Angeles, and the air quality index was, you know, 180. And you walk outside, it smells like there's a giant bonfire burning, and there's ash on your car, and, you know, the sky is completely gray, the sun is blocked. So, we're having really serious problems with these wildfires. And the problem with these particles, especially the PM 2.5 particles, the small particles, which are the particles smaller than 2.5 microns, is they penetrate really deeply into the lungs. It's hard for your lungs to remove them. And they're the particles that are causative to developing cancer later in life, heart disease, and COPD. These are very, very dangerous particles that you don't wanna be breathing.

Katie: That makes sense. Okay. So, let's talk a little bit about mitigation there. And I know there's some general strategies, for instance, it's often quoted the NASA study that certain plants can be beneficial to indoor air. I know you have specific solutions as well, and I wanna delve into those. But what we've talked about so far, it would seem like when it comes to the general things we're dealing with in indoor air, removing the things that are causing the problems is also part of that equation. So getting out the pesticides, and the phthalates, and the air fresheners, and the things that are off-gassing seems like it's a part of that equation. From there, can you kind of give us a tiered approach, like are plants useful?

Peter: Yeah, sure. So I think, Katie, you said it very well, which is, you know, to the extent that you have control and that you can also economically afford it, you wanna reduce the contaminants that you're putting in the air. And that's the absolute first thing that you should do. When you use cleaning products, buy environmentally friendly cleaning products. Don't use chemical cleaning products. The same with personal care products. You know, a lot of people like to use air fresheners. They burn candles and they have synthetic fragrances in them. So just be more selective about what you put in the air. If you're gonna paint your house, use no VOC paint. So, you know, please be proactive in keeping that air quality within your home as clean as possible, right?

And then in terms of mitigation, you know, the density of plants that we really can have in our home isn't enough to significantly positively impact the air. I'm an advocate for having plants in the home. I mean, they're beautiful, they're uplifting. It connects us with nature. But they're not gonna have a significant impact on the air quality and they're not gonna remove particulates from the air. One thing I recommend for everybody, if you have central heat or central air in your home, every central HVAC system has a return air filter in the system. And we all should be changing that regularly. But also, there are better quality filters that you can purchase online once you know the size of your filter, the correct size. And what you should be looking for is, like, for furnace HVAC filters, there's a rating called MERV, M-E-R-V. It's one acronym that I actually don't know what it stands for.

But get an air filter that's MERV 10 or above. MERV 13 is the best. But you have to be very, very careful which ones you buy because you wanna buy one that doesn't restrict your airflow. And you can look on, there's a Consumer Reports magazine in the website Consumer Reports. they've actually reviewed and tested all these HVAC filters. And this is a first line of defense in your home to help knock down particles in the air. You know, my experience is, I have them in my own home and is that they're just not enough. And another recommendation that I make, and I think many people know I'm involved with a company that makes air purifiers, is having a good quality air purifier in the rooms that you spend the most time in is also very, very helpful. And we can talk a little bit more about, you know, what to look for in an air purifier if you like.

Katie: Yeah, I definitely wanna go deep on that. I also would love to know, is it helpful to open windows, assuming that there's not something massive going on with outdoor air quality, like, there are acutely in certain areas right now. In general, is it helpful to open our windows when we're able to?

Peter: Sure. Well, it all depends what you're trying to accomplish. And it's gotten so complicated these days, you know. But one thing we haven't touched upon also is bacteria and viruses in the air, and how to mitigate that. But in terms of windows, I always say to people, "You wanna know what the quality of the air is outdoors before you open your windows." So, if the air quality outdoors is good, you know, check the local air quality index and it's under 50, you know, sure. Go ahead and open your windows. It also depends on seasonal allergies and if you have allergies to, you know, pollen, and trees, and things like that.

And I think the last thing is it also depends how far you live from a major road or a freeway because one thing that the science is pretty clear on now is that if you're within 500 feet of a major thoroughfare, or a highway, or a freeway, that you have a much higher risk of heart disease, and stroke, COPD, and even dementia. And there is some research to show that that can actually extend for as much as two miles. And probably 80% of the population of America lives within two miles of a major thoroughfare or a freeway. And so, there's a lot of things to consider when you open your windows.

Katie: Definitely. And that's a perfect segue. So, let's talk about bacteria and viruses. Certainly, I think there's more awareness, especially about viruses right now than there potentially has been in the past. And it's

something that's top of mind for a lot of people. It also seems like it's slightly more complicated and like more complex to deal with than just some of the things we might encounter, like we've talked about, that are found in indoor air. So, talk us through the difference with viruses and bacteria, and what we can actually do about those. And I think that will be a perfect segue into what to look for in an air purifier and how to know we're finding a good one.

Peter: Sure. So, you know, for people who are in the air purification business, we kind of look at bacteria and virus as particles. They're a material particle and they have a certain size. So, bacteria are small, but they're a lot bigger than viruses. So, a bacteria is usually like around 1 micron in size. And viruses are much smaller. And for example, the coronavirus, which people are concerned about right now, it has a size of about 0.1 micron, but then that's an individual virus, and they tend to, there's some science that indicates that they are contained in droplets, and those droplets are more in the 1 micron size. So, you could say that an individual coronavirus and other viruses, not just coronavirus, they're usually between 0.1 micron and 1 micron, and bacteria are about 1 micron in size. And, Katie, what would you...I got a little hung up on talking about the size of viruses. What would the follow-up question be?

Katie: Well, I guess, like, are there extra special considerations with trying to mitigate those? Like, I know, it sounds like they're a little bit more complex to identify if you for sure have them but also to be able to filter out in the air.

Peter: Yeah. So, because we view them as particles and we know in the air purification category, you have a category of air filters called HEPA filters, high-efficiency particulate air filters. And they capture 99.97% of particles as small as 0.3 microns, right? So, I think right there, you know, we're not talking about 0.1 micron, which is the virus size. And just like I was talking about filters for your central air conditioning and heat, and their different quality of filters. Even in the area of HEPA filters, you could say there's regular HEPA and then there's medical-grade HEPA. And the medical-grade HEPA is even more efficient. It will capture particles, you know, they call it to log 4 in scientific terms, which means 99.99% of particles, at least that much, at 0.1 micron.

And in order to be certified by a government agency to have an air purifier that can be used in a medical setting, it needs to have that log 4 certification. And so, if you're concerned about removing viruses from the air, that's what your objective is, you want to have an air purifier that is this medical-grade HEPA and that removes 99.99% of viruses down to 0.1 micron. And that goes beyond the regular HEPA standard.

We use in the air purifier that we make, which is called Air Doctor, we use a medical-grade HEPA filter. And when the concern about capturing viruses came up, we went and had our Air Doctor independently tested at a bio laboratory for a wide variety of bacteria and viruses. And although you can't get air filters tested specifically for CV-19, it's just too unsafe, there are what they call analogs, so you use similar size viruses that behave in a similar way and you test if you capture them or not. And we've done that testing on Air Doctor, so, you know, we feel confident in saying that Air Doctor will remove 99.99% of viruses down to 0.1 micron.

Katie: So let's go deeper on that, on what to look for in an air purifier. I know you've done a ton of research and actual development on this as well with Air Doctor. And those are the filters we have in our home right now. And I will say it's fascinating because, well, you could explain it better, but there's a sensor on the Air Doctor and it can sense when my indoor air quality changes if I'm cooking something on the stove and it smokes, the filter picks up and goes faster. And that's been fascinating to see. But talk about the technology that went into Air Doctor and what it's able to address in the air.

Peter: Sure. You know, as way of background, I've been making manufacturing air purifiers for 20 years. I was the exclusive supplier, my company, not me personally, of air purifiers to Costco for over 10 years. We were a major supplier to Walmart, and Bed Bath & Beyond, all the big box retailers. I sold that company and I decided, you know, I wanted to make the air purifier I would want to own, I would want my friends and family to use, kind of irregardless of price. When you're dealing with big-box retailers, there's always compromises on price points, and features, and margins. And, you know, I did that for so many years.

So, I'll just tell you the things that are really important to look for when you buy an air purifier for your home. So, you know, the first thing is, you know, what is the quality of the filter? To me, especially in this environment, a HEPA filter is no longer the gold standard. You need medical-grade HEPA. We call our medical-grade HEPA Ultra HEPA. And we've tested our air filter to remove 100% of particles at 0.003 microns. It's 100 times smaller than the HEPA standard. So the first thing is the filter. The second thing is, a lot of air purifiers, when you open them up, you'll see the filters, they don't fit tightly and snugly into the air purifier and they don't have a seal on them, which means that a lot of the air actually goes around the filter and you think you're filtering the air but really you're just recirculating the air in the room. And so, having a sealed system is really critical. You wanna look for a sealed system. Of course, we incorporated that into the AirDoctor. Then you wanna make sure that the air purifier is large enough for the room that you're using it in and, you know, you could say that the ideal frequency of cleaning the air in a room is around six times per hour if you're in a medical environment. In your home it can be down to three times per hour.

So, you wanna know how effective the air purifier is and if it's sized properly, you know, for your room, there's a measurement that you can use to compare one air purifier to another. It's called CADR, C-A-D-R, Clean Air Delivery Rate. And I always recommend that people look for an air purifier with a CADR of about 300. That means it will circulate the air in a 450 square foot room 6 times per hour.

Then another area that you wanna be concerned about is, you know, do you wanna just remove particles from the air or do you wanna also remove chemicals from the air, these volatile organic compounds, and formaldehyde, and gases, things like that. So the Ultra HEPA filter only removes particles. You need a substantial carbon filter to remove gases from the air. So these are some of the main features that I recommend people look at when they're buying an air purifier. Of course, you want one with a very high-quality motor. If it's too noisy to run, you're not gonna wanna run it. You know, I like to have one that's attractive and has nice industrial design. So those are other considerations to take into account.

Katie: Gotcha. That makes sense. Okay, so walk us through, on a practical level, how someone could figure out, maybe for their house or start to figure out how many air filters they need and where to put them. I love the idea you said earlier about having them in the rooms you use the most, which for many of us is our bedrooms because we are sleeping there and your breathing changes when you're sleeping. So your body is actually more at risk from things when you're sleeping, which is also why I'm a big proponent of really prioritizing your sleep environment, and your mattress, and the things you're coming in direct contact with while you're sleeping. But walk us through how we can figure out how to best optimize our indoor air quality, how many filters we need, and where to put them?

Peter: Sure. So, portable air purifiers, they can only purify the air, you know, in contiguous space. So, if you go into your bedroom and close your door, then, you know, that air purifier is not gonna be purifying the air in your children's room or in your den. So, I recommend that people, you know, purchase an air purifier for each room for which they spend the most time. So that you might say is your bedroom, you might want one for your children's rooms. And then if you have like a den that you spend a lot of time in, you know, that would be another good choice. And you wanna have one AirDoctor for no more than 900 square feet of open-plan space. So if you have a home and it has a large kitchen that is contiguous with a dining room, and a living room, and your den, and let's say that space is 2,000 square feet, you're gonna wanna have two AirDoctors in that open space.

Katie: Gotcha. Okay. That makes sense. And from the virus and bacteria perspective, I know, like I said, this is especially a concern for a lot of people right now. Is that kind of spacing enough to address viruses in the indoor air and how does that come into play with surfaces? Because there's also been a lot of talk of, you know, can it live on surfaces? Is that something we approach differently?

Peter: Yeah. So, now let's switch gears completely for just one moment and talk about if your concern is viruses in an indoor space. Let's say you have a hair salon, or you have a doctor's office, or even in an office setting, and people wanna go back to work and they have concerns about viruses in the air. So, now you have a different situation. And I'll try to start at the top on this. So, one, you wanna circulate the air six times per hour. So, not just three times per hour. So, like, now, like, an AirDoctor, which has a CADR of roughly 300 and it circulates the air in a 450 square foot room 6 times per hour. So I would suggest, you know, for every 450 square feet, you want to have an AirDoctor.

And the second thing is that, you know, you mentioned earlier that one of the features of AirDoctor is that it has a sensor that automatically adjusts the speed based on the quality of the air. So, this is a very unusual situation that viruses at 0.1 micron, they're actually too small to alert that air sensor. It'll detect smoke but it won't detect the viruses. And so, what I recommend for people who are using the AirDoctor to mitigate viruses is that you take it off the auto mode, and you put it on the manual mode, and you operate it at the highest speed that you can comfortably operate it on. You know, it's almost silent at the lower speeds. But AirDoctor does make some air turbulence noise at the larger speeds in an office setting or a sitting room at a doctor's office, it's not bothersome. So that's what I recommend is run it at the highest possible speed that you can and take it off the auto mode.

Katie: Okay, that makes sense. And I know I've gotten lots of letters from readers who are in the areas that are getting hit by smoke right now. And they say they notice a huge difference of having the AirDoctors. And I know you guys have a discount code available for people. I'll make sure that's in the show notes at wellnessmama.fm. But is that the same protocol you'd wanna use for smoke?

Peter: You know, the AirDoctor will sense the smoke in the air, like I just mentioned. And so, it will adjust the speed accordingly. And you don't have to worry about manually adjusting it. You'll see. I mean, it's just amazing... Acquaintances and friends who I haven't spoken to for many, many years, have all come out to reach out to me recently because it's so difficult to get air purifiers. They're all sold out on the West Coast. And we happen to have quite a bit of inventory, although even we're challenged right now. At the time we're recording this, we have a lot more inventory coming in. But, you know, that sensor goes from blue, meaning the air is clean, to yellow, meaning it's borderline, to red, which means it's unhealthy. And everybody in California and Oregon that I've spoken to has said, as soon as they open the door of their house, their air purifier goes to red. So, you can run it on the auto mode, it will be just fine for smoke.

You know, I wanted to get back to virus mitigation for one minute because I think this is an area that really concerns people. And if your goal is to reduce viruses, feel safe indoors, you know, and you read the reports like I do from the CDC and the FDA, you know, here are the recommendations, which is, you wanna get as much airflow as possible. So, that means if you have a central HVAC system, and you're not dealing with wildfires, you want as much outdoor air coming in as possible. If there are windows and you can open them, you know, you wanna keep those windows open and you wanna run an air purifier at the highest possible speed that has a really high-quality Ultra HEPA filter or medical-grade filter. And all of these things are going to reduce the viral load in your environment. And there seems to be some indication that it's the exposure to viruses, the degree of exposure and the concentration of viruses that seem to contribute to bad outcomes for people with coronavirus. So, those are the recommendations that I've read about and I'm just passing on to you what the government is recommending.

Katie: And, yeah, as a follow up to that, I think just to clarify, for any moms listening, certainly this is a new one that we're all dealing with this year for the first time. But I would assume the same advice applies when kids come home with a stomach bug or there's anything going around the house. You know, I have six kids. So, often if one person gets something, it's a little bit like dominos for everybody else to get it. But this is a protocol that moms can use for any kind of virus or bacteria that we're encountering, right?

Peter: Absolutely, yes. And, you know, we're getting a lot of interest right now from both public and private schools, where they wanna put air purifiers in classrooms. And so we're engaging actively with that community and having lots of conversations about what best practices are.

Katie: Gotcha. Okay. So another thing that definitely comes up as a question, when it comes to air purifiers, or anything that's electrical that's in the house. I have really savvy and educated listeners and readers, and a lot

of them are also concerned about avoiding high levels of EMF for various reasons, especially people wanting to get through certain health conditions. And so this is a question that comes up often, I'm guessing you probably also feel that as well. So I wanted to bring it up here and address, are there any EMF concerns? Have you guys measured this and what do people need to know about EMFs when it comes to air purifiers?

Peter: Well, I'm very privileged and honored that, you know, we work with many very prominent natural health experts. And every one of them is concerned about EMFs and every one of them have tested AirDoctor with their own EMF equipment, and assured me that it produces extremely low levels of EMFs. Any kind of electrical motor will produce some like a blender. But once you are more than two or three feet away from AirDoctor, it becomes undetectable. So, my recommendation is just make sure wherever you put your AirDoctor, like, if it's in your bedroom, don't put it within two, three feet of your bed, and then you shouldn't have any exposure to EMFs from AirDoctor.

Katie: Yeah, that's always my advice as well. And something I often tell people is, with any kind of EMF, the distance really, really, really matters. Even something as simple as the cell phone, and with Wi-Fi, and cellular data, even if you're just a couple of feet away from it, it's almost immeasurable. It's so much lower. Same thing with, I use a chiliPAD in my room to sleep on, and it's very low EMF just like the AirDoctor, but I still wouldn't put it right next to my head. And pretty much a general good rule of thumb is if it's more than an arm's length away, then it's not gonna be causing EMF damage, short of, obviously, the big ones like radio towers and things that I would obviously not suggest having in your bedroom to begin with. But for any kind of home appliance, the arm's length rule tends to kick in. And that's what we do in our house as well.

This episode is brought to you by Gladskin, an incredible new product and resource for anyone who is struggling with eczema. This product is rooted in a really unique scientific understanding of the skin's microbiome. Gladskin has unearthed an innovative new way to solve eczema that helps to treat the root and not just the symptom. It's a new category of non-prescription eczema treatment rooted in endolysin science and has received recognition from today's leading dermatologists and pediatricians. While most microbiome studies have focused on the health implications of what's found deep in the gut, we're now finding that healthy skin, just like a healthy gut, requires a balance of bacteria. In fact, four out of five people with eczema have a specific type of imbalance in their skin bacteria or their skin microbiome. And this is where Gladskin comes in. When the skin balance bacteria gets out of balance, eczema is more likely to flare. So a targeted approach to that takes into account the microbiome's good and bad bacteria is critical to relieving the redness and itching of eczema. Although new and unique in its approach in the U.S., this has already been a proven solution for eczema in Europe for five years and received recognition from leading dermatologists and pediatricians. It's also been accepted by the National Eczema Association and is a different approach altogether compared to steroid creams and traditional over the counter moisturizers. The best part of Gladskin is hypoallergenic and free of steroids, fragrances, drying alcohols, and harmful preservatives. It's stored fresh in a pharmaceutical quality bottle so they don't need to use the chemical preservatives found in most over the counter creams and lotions. I hear from a lot of you whose children have eczema, and I'm so excited to get to share this resource. You can find out more and get an automatic 10% discount by going to wellnessmama.com/go/gladskin. To get a 10% discount, it should be automatic, but you can also use the code WellnessMama10 if you have any trouble.

This episode is brought to you by Joovv Red Light Therapy that I have talked about for a really long time, and that is a regular part of my daily routine. I wanted to make sure to talk a little bit more about them today. You've heard me talk about red light therapy before because it is part of my daily routine. I feel like this is an extremely effective health modality. And it's something that I make a priority all of the time. It's been wonderful for my skin and my thyroid, also my energy levels. And I've written on my blog quite a bit about the many health benefits of red light therapy. I found more and more in the research that light is such an essential part of health. We think about nutrition and sleep, and a lot of the other aspects of health, but we often forget just how drastically important light is to our health. And red light therapy is one of the important types of light that we often don't get enough of. Many of us are exposed to all kinds of artificial blue lights in our homes, but we don't get enough of spectrums like red light and like all of the spectrums that come from the sun every day. And the way that I remedy this is totally inexpensive way of spending time outside every morning in the natural sunlight, and also using red light therapy daily. Anyone who's dabbled in red light therapy has probably heard of Joovv because they are the leading brand. They have pioneered this technology, and it's the light that I've had in my home for many years. Joovv is just now launching their next generation of devices and they made upgrades to what was already incredible red light therapy systems. Their new devices are sleeker, up to 25% lighter, and with all the same power and intensity that we've come to expect from them. But with their new intensified version, you can stand as much as three times further away and still get the recommended dose. They've also upgraded the setup so it's very quick and easy to mount, and set up, and can fit in just about any space depending on what size you need. And they have a cool new feature like recovery plus mode, which uses pulsing technology to give yourself an extra boost to recover from a tough workout or a tough day with the family. Also, as a busy mom, I need all the sleep I can get. And I find that using a red light device at night helps to wind me down from the day. But now they have something called Ambient Mode for calming lower intensity light at night, which I mentioned avoiding blue light at night to help your body and your natural circadian rhythms. And adding in soothing spectrums of red light can also be really, really helpful. So, definitely check it out. Exciting news, for a limited time, Joovv is going to hook you up with an exclusive discount on your first order, and you can find out all the details by going to joovv.com/wellnessmama and using my code Wellnessmama on your qualifying order.

I know we're going to put the link in the show notes so that people can get that discount. But talk a little bit about what you guys are doing at AirDoctor because I know you're running some special discounts, especially with everything going on right now to make sure families can stay safe.

Peter: Yeah, sure. So, you know, we like to be a partner with the people that we work with, and Katie is a great partner of ours. And so, in appreciation and respect to the work that Katie is doing with Wellness Mama, so anybody who wants to purchase using the link that we'll be providing in this podcast will receive \$300 off an AirDoctor. AirDoctor the retail price is \$629. And we've sold many, many of them at that price. And if you look on Amazon, it's a little less expensive than that, but not much. But you'll be getting the best possible deal by using the link, and you'll receive \$300 off, which means you get AirDoctor for \$329, and I think the shipping cost is \$30.

Katie: Awesome. And like you said, that link will be in the show notes at wellnessmama.fm so you guys can lock in that discount. A couple of unrelated questions I love to ask toward the end of interviews. The first being, if there is a book or a number of books that have dramatically impacted your life, and if so, what they are and why.

Peter: Oh my gosh. You know, my wife, who's also named Katie, she's a big reader. And I'm a big reader but I'm a big reader of scientific journals, clinical studies, and lots of nerdy type of things. In terms of books, it's a very personal thing. When I was just kind of starting out in my career, there was a book that I read called "Think and Grow Rich," and that was very impactful for me. And I wanna make it clear, as a young person, I wasn't trying to become rich, but I was trying to create my internal vision. And that book was very, very helpful to me in terms of learning how to imagine things that I wanted to create in my mind and holding on to those visions, focusing on them, surrounding myself with people who supported the visions and goals that I wanted to achieve.

And I think that book helped me understand that if I held beliefs and objectives strongly in my mind, and I had a firm intention to create them, that I could create what I wanted to create. So, that was one book that was very interesting to me. This is another very personal thing, which is, I'm a person who always wanted to understand the deeper meaning in life. Why I'm here. What my purpose is? Where I'm going? And I like to understand the philosophy from many, many different points of view. And there was one book when I was young, that I found to open my eyes to the understanding that there were a lots of points of view about these big philosophical questions and not recommending like one set of religious beliefs over another. But there was a book that I read called the "Autobiography of a Yogi," which was my first understanding of how people view life from the East and in the Eastern world. And I think one thing that's very important for us to all coexist in this world harmoniously, is to realize that there are many different points of view. And that one point of view may not represent the truth to everybody. So those are two books that impacted me.

Katie: I love it. I'll put links to those in the show notes as well. And then, lastly, if someone is interested in continuing to learn about this, especially about air quality, where would you recommend that they keep learning? I know you guys do have some resources for these, and I can link them in the show notes as well. But I think this is a really important topic because we breathe more than we do anything else, more than we eat, or drink, or even sleep. And so, the quality of the air we breathe makes a big difference. So where would you send people to keep learning?

Peter: You know, we have Air Doctor Pro. We have a Facebook page. And the purpose of that page isn't really to promote the AirDoctor product, but it's to post authentic research that is on being done on what contaminants in the air can create health problems, studies that are being published, air quality problems, not only in the United States but around the world. So, I think that's a good resource. And, you know, I personally curate the content on that page as it relates to the science side. We have some social media people that like to post more anecdotal user-friendly articles. And so there's some of that also. And I try to keep it completely non-political. You know, if there's anything of political nature, I try to leave it off that page. And if something gets on there and somebody brings it to my attention, then I do delete it. That's a good starting point, I think.

Katie: Perfect. I will make sure that's linked as well. Like I said at the beginning, Peter, I think this is such a timely topic right now. I know my heart goes out to many of our listeners and readers who are in the wake of some of these things going on. And I'm grateful to you guys for offering such a big discount. Like I said, make sure you guys check out the show notes at wellnessmama.fm to get that link. And I'll also be posting it on social media around the time that this airs, so you guys can find it as well. But, Peter, thank you for your time today, and for all the research and work you've done.

Peter: Well, Katie, thank you so much for having me. And thank you for being such a positive impact in the world, and advocate for healthy living, and such a genuinely sincere person who is trying to make people's lives healthier, happier, and more fulfilling. So, it's an honor to be on this podcast with you. Thank you very, very much.

Katie: Thank you. And thank you as always for listening and for sharing your most valuable resource, your time, with both of us today. We're so grateful that you did, and I hope that you will join me again on the next episode of the "Wellness Mama Podcast."

If you're enjoying these interviews, would you please take two minutes to leave a rating or review on iTunes for me? Doing this helps more people to find the podcast, which means even more moms and families could benefit from the information. I really appreciate your time, and thanks as always for listening.