



Transcript: #506 How Blue Light Destroys your Sleep Cycle and Health with Matt Maruca

Dr. Wendy Myers:

Hello, everyone. I'm Dr. Wendy Myers. Welcome to the Myers Detox Podcast. Today, I've got a great guest for you, Matt Maruca. He's going to be talking about how to go on a light diet for optimum human health. I think this is such a good show because regulating your light and your input of light is one of the easiest things that you can do to improve your heart rate variability, improve your sleep, and enjoy all the benefits of doing that as well. Because so many of us all day long are looking at our phones, looking at our iPads, looking at our computers, and have a diet of junk artificial light. The light bulbs and the lighting are around all day long at work and school. It's playing havoc on our health in many different ways. We discuss all those different ways that artificial light is causing an issue in retinal damage, in reduction of melatonin production, in reduction of sleep quality, which leads to so many different other health issues.

All that and more on today's show. Really, really interesting conversation. We go well beyond light. We go into how we're light beings, how the frequencies of light, and all the different ways that you can protect yourself, including blue light-blocking glasses and some nuances that we haven't discussed before on the show relating to blue light-blocking glasses. Tune in this very, very important show with Matt Maruca of raoptics.com. You guys listening to this podcast, I know you're really concerned with your body's burden of toxins. That's one of the main reasons you're listening to the show. I developed a quiz at heavymetalsquiz.com. It takes a couple of minutes to take, and you get your relative body burden of toxins, and you get your result showing these things after you take the quiz. Then you get a free video series that answers all of your frequently asked questions about detoxification and heavy metals and how to assess them and get rid of them.

Go take it at heavymetalsquiz.com. On the show today, we have Matt Maruca, and he's the founder and CEO of Ra Optics, raoptics.com. It's a company that teaches about the essential role that light plays in health and develops advanced light therapy-based products. He founded Ra Optics after a decade-long personal health journey that ultimately led him to light. The discovery that we're ultimately beings of light has led him to a profound interest in the nature of consciousness and existence itself. Matt spends his time teaching, traveling, working with top executives and celebrities, and building the future of lighting for the world. Matt enjoys singing, reading, running, and surfing, and especially traveling and exploring. You can learn more about Matt and his work at raoptics.com. Matt, thank you so much for joining the show.

Matt Maruca: Thank you so much for having me, Wendy. It's great to connect.

Dr. Wendy Myers: Yes. Talk to us about why light is so important and what got you into and so passionate about this field.

Matt Maruca: There's a lot there, but that's a good start. I would say that light is so important for a number of reasons, but primarily because of our understanding of the universe. The most advanced understanding of the universe according to modern science holds that light is one of the foundational building blocks of everything. If we look at the universe, we have basically vibrational energy. Vibrational energy is the best way to put it for the listener. We have light, which is a derivation of the electromagnetic force. There are four fundamental forces, weak force, strong force, electromagnetic force, and gravitational force, also known as fundamental interactions, a term they've used more and more. Light is one of the main, let's say, results of one of those forces, which is the electromagnetic force. It is one of the primary forms of energy transfer in the universe.

If we look at the universe from the perspective of just a modern scientist, you have matter and you have energy. Then they have other theories about things that we're not sure about, like dark matter and antimatter, in other words, that kind of thing. That's all up in the air. Nobody's really sure about that, that I'm aware of in the scientific community. Going with light and matter or energy and matter, light is kind of, how do I say? A majority of everything that exists. Even Einstein who received the Nobel Prize and is known as one of the best or most famous, important scientists of all history, one of his critical achievements was defining that all matter. The things we consider material and solid actually can be reduced down to energy. It's actually mass-energy equivalence. When that mass is turned back into energy, it's typically in the form of light.

Light is the building block of what we know in our world. It also happens to be, take it a step further, the thing that interacts with matter. In addition to making matter at a deeper level, light by itself can interact with matter that already exists, bring it to life, and give it energy and chemistry. In all chemistry, all chemical interactions occur with interactions related to light. When two

chemicals bond together, they release or absorb light depending on the type of interaction. When electrons in an atom change their energy state, they either absorb light or photons to increase their energy state or re-emit photons. Light is the foundation of basically everything in the universe, including life. The way I got interested in it was because I had some health issues as a kid and I started searching, as you would. My mom tried to take me to different doctors and things when I was under 10 years old and around 10 years old. By the time I was 13, I was getting really bad breakouts of acne all over my skin.

I was like, "Okay, this is not something I want." I was in high school at the time, and I was worried about my appearance. I started researching about that. I learned about diets and the role that diets could play in health, and I thought, "Oh, this is interesting. We can change our genetic expression." Epigenetics was the buzzword, the thing I learned about in 2013, and 2014. I was fascinated reading about this as a high school student. I thought, "Man, this is important." I took the bait that all these paleo-dieters were talking about, which is that the way I can change this is through my diet. That's basically the only real significant way. They're saying, "Everything else is small. 20%, maybe. 80% is just your food and nutrition." I bought that and I went with it.

When I was struggling still, I thought there must be more. Then I learned about this research showing that we are essentially beings of light, beings of energy, electromagnetic beings. I thought, "This is interesting. Are you telling me that basically if my diet is perfect, but my light diet, as I now call it, is suboptimal, that means my mitochondria, my cellular engines that process my food are going to be not functioning well?" As I read more and more, that's exactly what the research is saying. If we have a perfect food diet, but our light diet so to speak, our circadian rhythm is disrupted because of blue light at night. Our cellular engines can't work at their highest level.

I thought, "Wow, there's a whole new level of layer to health that I had never even considered." Then think one thing leads to the next, and you realize how deep it goes and how you can use blue light protection, which is what I started a company doing, making blue light protection glasses to protect your circadian rhythm. You can use red light therapy to enhance your mitochondrial function. You can use color therapy or chromotherapy to improve different functions, which is something we're working on products for as well. Then you can meditate and cultivate your inner light. I thought, "Whoa, this goes way deeper than I expected." That's really why it's significant and how I got into it.

Dr. Wendy Myers:

Totally, that resonates with me as well. Because when you start looking at this other layer our mitochondria take all these cues from our environment and it sets our circadian rhythm and the mitochondria absorb bio-photons from the sun and all these things. This is the nutrition that we absolutely need. With our body taking cues from the outside light, all of this artificial light and blue lights and the phones and the screen, the computers and the TVs and all these things that we're exposing ourselves to, people just don't realize how much that is

screwing up our health and our circadian rhythms. Can you discuss that a little bit?

Matt Maruca:

Absolutely. I couldn't agree more. Well, the basic idea is that all living organisms contain a clock that is responsible for coordinating. I should say coordinating would be the best word. Synchronizing is an even better word. Our internal functions, so synchronizing our internal functions with the external environment. Why? Well, because if you're a living organism, which is let's say a physicochemical interaction of matter and light and water and energy on the surface of the earth, and it's spinning every day. For a portion of what we call a day, a day is one rotation of the earth around its own axis, and hence, the absence and presence of sunlight, it's the most significant change in a day. If that same change is happening every single day and one part of the day you're in, you're exposed to some very strong electromagnetic energy, which could even be toxic depending on the chemical or the organism.

Then another part of the day, you're not exposed to that energy, and typically the temperature gets a lot colder. The thermal energy in the air gets a lot colder, a lot lower when the earth is in its own shadow or what we call night. There's still enough heat for us to survive. We don't just freeze because all the objects have absorbed energy from the sun and they're transferring it through the night, like the earth itself and rocks and buildings and everything's reabsorbing some infrared light. It doesn't get to the surface of Mars in a second, the dark side of Mars, but it still gets a bit colder as everyone who has been outside at night has experienced, especially if it's cold winter, it gets even colder at night. It would be really useful for that organism trying to survive and grow and evolve and thrive to have some way of being able to account for this really predictable cycle.

What did life do? Well, we integrated clocks into all of our cells, and every gene, every protein that's coded for in the body, the genes always start with clock genes. That's one of the things they've discovered. It's fascinating. Clocks and circadian rhythms are everywhere you look. Our bodies have this clock, and when we're exposed, to your question, exposed to artificial light at night, for example, it throws off our body's clock. Artificial light at night basically tells the brain that it is time to wake up when it's actually time that we should start preparing for rest and regeneration according to this circadian rhythm that living organisms have. Some organisms are nocturnal. For them to survive, it's important to wake up in the evening. Maybe they're a hunter, a predator animal, and they should be awake at night so that they can hunt down the deer who are sleeping or something like that. Or maybe it's their time to go out and forage for mice, like an owl when the mice are awake at night or it's their time to go out and eat the vegetables that are growing when their predators are not awake.

Everyone has different rhythms. Every organ has different rhythms for different reasons, but we have them. Humans have them. We're diurnal, which means we're not nocturnal. We're awake during the day. We start to throw off that circadian rhythm with exposure to blue light at night, and it's pretty detrimental

to our physiology in a number of ways. The most important of which is that our brain doesn't have the signal anymore, the darkness to start releasing melatonin. Melatonin is the body's most important antioxidant, anti-aging, and anti-cancer detox in some way to improve the function of our mitochondria and our cells. If we disrupt that stimulus of our body's, let's say free master healing molecules, then we're going to affect our health in a number of ways across all systems, and it becomes a big issue.

Then even during the day, that's one risk of blue light, especially at night because the blue wavelengths are what the scientists have discovered, which signal our circadian rhythm through our eyes. Now, during the day, excess amounts of blue light from different devices are uncoupled, so separate from near-infrared light, which is always present in the sun, but not present in the modern LEDs and screen devices and serves as a protective and healing wavelength of light for our eyes, for our retina, for our skin. When we take out the infrared from our light bulbs we just have blue light, hence, the term uncoupled. They're no longer always together. Without the infrared light, the near-infrared becomes pretty disruptive and detrimental to our cellular physiology and metabolism in the mitochondria of our retina or skin cells and so on.

Blue light can have all sorts of negative effects like aging our skin, but also damaging our retina, which is a really big issue for a number of reasons, both for our vision but also for our overall health and wellness. The two main things we work on with blue eye protection eyewear are melatonin protection in the evening from blue light at night. That's why the nighttime sunset lenses that we make have these darker reddish lenses. They're very, very strong. Then during the day, the lenses block blue light to protect from retinal damage, but they don't block quite as much of the blue and the green because we don't need full protection. They still block more or less 90 to 95%, depending on the light source you're using to test. Anyway, I typically don't even start talking about my own glasses, but it's relevant to the question you asked.

Dr. Wendy Myers:

That is my biggest concern is the potential for retina damage by staring at computers, by staring at our phones. We're doing it all day long. I mean, all day long. Not to mention the light sources that we're under at work or school or what have you. The implications for children growing up today, just staring at the screens all day long from the minute they wake up, to the minute they go to bed. A lot of people in the future are going to have macular degeneration and retinal damage.

Matt Maruca:

It's already bad enough, it's already really bad. They blame the sun, but that's misguided for a number of reasons. That's not to say that the sun can't cause these issues, like retinal damage, macular degeneration, and cataracts. Based on my most current understanding, the sun can cause these things if we have excess exposure or if we're exposed to the sun a lot with sunglasses on. However, in general, for most people, the issue is that they're exposed to too

much artificial light. Just looking back at the medical history and the records of the incidents of these types of issues over the last couple of hundred years, all of these ocular issues have actually increased fairly significantly. I shouldn't say all of them, I haven't studied all of them. The major problems that we're seeing today are increasing over the last hundred years or so, even over the last 20 or 30 years, which implies that it likely has a lot more to do with the transition.

How we're living today, much more artificial lights, screens, indoor time fluorescence, LEDs, and a lot less sun. Even though the sun technically has stronger radiation, it's a much stronger light source, let's say, what we evolved to, and therefore, our cells adapted to handle that radiation and deal with it. We have systems where when we get too hot, we go in the shade and we allow ourselves to cool off. Now we just, when we get too hot or the light's too bright, we just put on sunglasses and we go on with our day or we put on sunscreen and we go on with our day, and that becomes an issue. That's where I believe, and the research is very supportive of this, that, that's where we've gone off the rails or wrong, so to speak.

Dr. Wendy Myers:

I think it's a real problem. A lot of people put on sunglasses and they're actually not protective at all. They might give you shade, but because a lot of people are wearing cheap sunglasses or expensive glasses that aren't protective they can get damage from the sun because they're not the right protection.

Matt Maruca:

Even good quality, let's say good quality "sunglasses," the issue is that most sunglasses manufacturers, from what I've tested and studied, they're not aware of what happens when they just cut out the ultraviolet completely while leaving in, for example, all the blue. The ultraviolet actually serves a role to signal for multiple roles, but one is signaling the retina, or I should say the pupil, to adjust its size. If we remove the ultraviolet, but we no longer are able to, so we're no longer able to adjust the size of our pupil, then a lot more of the visible wavelengths of light, including the high energy, blue light, will still be coming in, ultimately causing more potential for retinal damage than if that mechanism was still intact. There's also research indicating that ultraviolet B light, which is what helps us make vitamin D through the eye, stimulates the production of the hormone responsible for the production of melanin in our skin.

The protective chemical in our skin protects us from this sunlight radiation in the skin. If we wear sunglasses, again based on some of the research, we're actually blocking that stimulus to protect our skin hormonally and neuro-chemically into the body and the skin. It becomes a bit of an issue. What we're looking at doing with my company is developing sunglasses that reduce the spectrum across the whole, so equally. Saying, okay, the light is too intense, let's reduce it, but let's not just chop out all the ultraviolet because that's not what, let's say, nature intended. Now, not that nature has a specific intent, but more what I mean, as I said before, is our biology adapted to a certain spectrum of light throughout the seasons, of course, fluctuating and even throughout the day. To just chop out

some of that light, has consequences that some of which we know about and some of which we may not even know about yet.

Dr. Wendy Myers: When you're looking at the polarized lenses, you're like, "Ooh, those are nice glasses." It's still, it's just chopping out the ultraviolet. We need a whole food diet, a whole food light diet, so to speak.

Matt Maruca: Absolutely. Exactly.

Dr. Wendy Myers: Tell us about your glasses. Your website is raoptics.com. Tell us a little bit about your glasses and how they can protect us from this constant flood of artificial light.

Matt Maruca: Absolutely. My company is called Ra, after the Egyptian sun god. I started it on my own, now almost six years ago, come September. It was really just because I had started learning about the role that light plays in health. I had started applying a lot of the things I learned and had this full protocol that I now call the Light Diet, but it was really a collection of different ideas from different researchers as well as a lot of information from one guy, Dr. Jack Kruse, who I learned a ton from about, and you're probably familiar. He's in my view, the pioneer in this field, and he put together a lot of principles. I wanted to be able to take this information and share it with others and explain it in a way that people could understand and relate to, and also, to make it practical.

Now, nobody at the time was making blue light protection glasses that actually blocked the right wavelengths of light, first and foremost, and also, looked really stylish. There were some companies making glasses that looked stylish but didn't block the right wavelengths of light. For example, they would block all of the light up to 420 nanometers in the visible spectrum. Light is measured in wavelengths and the number of the unit is nanometers. Blue light goes from around 400 to 500 nanometers. It's a little bit less, but it's approximately this. The blue light from the sun covers this whole spectrum, but the blue light from LEDs on our screens really is centered, this emission peak from an LED is centered around 455 nanometers, plus or minus about 20. That means it goes down to about 430, 435, more or less.

If you're blocking the light below 430, that's relevant if you want to protect yourself from sunlight, which isn't our goal, as I've touched on a little bit earlier. Instead, you're not blocking any of the wavelengths that are emitted by LEDs by doing this. Basically, the reason for this is that, as I understand at least, I can't be sure of the motive, whether it's lack of information, ignorance, or just malice, I don't know. I don't think it's malice or intentional, I just don't think they know. Basically, they're selling products that they say are screen glasses and they don't block the light that comes off of screens to put it really simply. They might look stylish so they're clear. Because people don't want to wear, at least this is their idea, colored lenses. That's one issue. The other issue is that the glasses that block the right wavelengths didn't look stylish.

The opposite issue, so you got the one where they look stylish, maybe, but they don't block the right wavelength. The ones that block the right wavelengths are like safety goggles that exist that you could buy from Uvex or some company. Maybe they're 12 bucks on Amazon, but they're clunky plastic safety goggles. They break after a while, and there's no warranty or anything like that, at least that I was aware of with the ones I was using. I go through a bunch of pairs and enjoy them, but I would also be in high school. I was in high school, so I'd be going to parties. I thought, "This is kind of lame." I wanted to do something. There must be a way for this to be cool. I had this idea of course, that maybe that could be done. Actually, a friend of mine who was also doing the same stuff, figured out how we could actually go and tint the lenses ourselves, or even before that, how we could get our lenses tinted and pick a cool stylish frame and then have this company do some tinting with these particular tints.

Then I learned, you know what, I could do this for myself if I wanted to. Then one podcaster named Luke Storey, who's pretty popular, the Life Stylist podcast, years ago, maybe a bit less. We had connected. He asked about how he could have these glasses made that my buddy and I had. I told him, and basically, it was difficult to connect him with this company. I was like, "Let me do it for you. I know how to do this process." That was just sort of proof of concept at the beginning that people wanted the right protection that looked good. Then since then, it's now been quite some time, but we've gone step by step by step to improve the quality of our lenses further and further, to block more of the light, the harmful wavelengths, to maximize the transmission of the light that's not harmful or that doesn't need to be blocked. You wouldn't want to remove that because it'll reduce color perception, and color rendering if you block light that you shouldn't need to block.

It's like blocking everything we need to, and nothing we don't for optimal blue light protection as well as color rendering. Then use a high-quality frame. That's basically why I started the company. We have two lenses, daylight lenses for during the day to protect from retinal damage, and this issue is related to blue light exposure from screens, LEDs, and fluorescent lights. Primarily again, for people working on screen devices, which is most people. Also, people, especially in an office or a store, a big box store or something like that. Then the main effect of the daylight lenses is that when we wear them like I'm wearing them now of course, because it takes off this stimulating energy of the blue light wavelengths, it's natural to feel the mind and the eyes relax a bit. Then your energy can balance out. Then what I find from years of using this product and many others, the feedback we've gotten from customers is that people's energy levels naturally start to rise, but in a natural way because they are balanced and relaxed.

Whereas they may otherwise be getting eye strain, headaches, and fatigue working on a screen, they're not anymore. We get amazing reviews of people saying they've literally had headaches everyday for years, and they went away

when they started using our glasses, when they're working on their screens, for example. Those are the daylight lenses. Now, the sunset lenses are more of a reddish color than these relatively light-ish yellow that I currently have on. The sunset lenses are designed, and that was actually the main product we started with, intended for circadian rhythm and sleep optimization. They block not only basically 100% of the blue light, 99.9 plus percent of all the blue light, but they also block into the green range. Because green is also closer to the blue rather than the red and the orange and the yellow, which are more of the colors of fire. They don't wake us up quite as much as the wavelengths of blue and green and for example, violet.

Anyway, we block the blue and the green, and it's darker, so it's actually harder to see through the lens, but that's partially intentional. Because you make it a bit darker, you fall asleep faster. Your eyes adjust. The pupil gets actually bigger trying to let that light in, but the body is more and more relaxed and ready to rest and fall asleep. These would be the sunset lenses. What happens is people wear these and they basically start to relax naturally in the evening when otherwise they'd be overstimulated by all these bright lights. You relax naturally in the evening, your eyes relaxed, your mind relaxed. Then when people finally go to sleep, their brain has already been preparing for night because it was blocking that blue light that says, wake up, wake up. Actually, experiencing darkness, even if they had lights around. People fall asleep more easily when they go to sleep. They sleep more deeply, wake up with more energy, and then obviously, have more energy during the day to thrive, succeed in their goals, and so on.

That's really what we focus on with the sunset lenses, and it's specifically the pigments in our lenses that we've worked with experts to develop that absorb these wavelengths of light that we test, that we test them under very high-intensity blue light conditions to make sure they're still absorbing even in any condition and they'll last for a long, long time. It's those pigments that absorb that light that basically allows our eyes to relax. It's the work we do in making sure we're blocking the right wavelengths. Anybody can make a lens that blocks some wavelengths, but it's important that we're blocking the right wavelengths. We look at, again, color rendering. We look at the hue of the lens and how the color is subjective, not even let's say, from a measurement standpoint, but just from a subjective experience. How is this hue versus that hue if they're going to both offer the same protection going to affect our users or whereas psychology and their mental state? Those are things we're all looking at.

Dr. Wendy Myers:

I don't think people realize how much of a stressor this is, the artificial light. Some people are particularly sensitive to this like they're much more sensitive than other people. I think we all could do with making this kind of lifestyle change. Because the majority of people are looking at their screens nonstop, and there's a price to pay. If you think about it, over decades of reduced sleep, less quality sleep, retinal damage, and things of that, the reduced melatonin

production, these are cumulative things that can have a dramatic negative impact on our health that people need to be thinking about. I think everyone needs to be making this type of change and reducing their blue light consumption, so to speak.

Matt Maruca: I would agree completely.

Dr. Wendy Myers: You mentioned a few before, but what are some of the more significant changes that people will start to feel and the benefits once they start making this change and wearing these blue light-blocking glasses?

Matt Maruca: There are quite a few, but the one that comes to mind right away is that we had a partnership with Aura, the sleep-tracking ring company last summer. Well, it's ongoing, but this is an Aura Ring I have on my pinky. Basically, if an Aura member wanted to refer a friend to purchase an Aura Ring, they could receive a free pair of Ra Optics glasses as a thank you from Aura. It was a really great successful partnership for everyone involved, I believe. The customers and the members were very happy with this free gift that they received. The cool thing for us was that many people didn't expect that it would work. Because they're in their own world and they don't know about light or blue light, and they thought, "Oh, it's just a free gift. I'll take it."

Then the amazing thing was that when they wore them, there were several customers who actually wrote us these reviews after the fact, they said, "I didn't believe that this could actually change my sleep the first night." I read that and I thought, "No way." I didn't believe the hype. The person said, "I wore the glasses and I had my best night's sleep in months the first night, and it persisted. Believe the hype, they live up to it." That was the title of the review as well, or basically lives up to the hype was the title. That's one, for example, just one of many. Then there was a woman who had, I guess, low-level autism diagnosed in her, I would assume 40s or 50s. She's a doctor as well and she actually has a company and organization that helps diagnose people with autism, especially as adults, and to give them the support they need as a community and the information they need. It's really cool.

It's called Embrace Autism. She wrote this all in her review and basically said, "I had noticed my sleep getting worse and worse and worse for years. Irrespective of what I tried, it was typically a concern." She said, "It's a concern for most people with autism in some way." She said, "As soon as I wore these glasses, my sleep score started getting significantly better, and I started feeling better sleep, specifically the sunset lenses." Because that was what was involved with the partnership, these red-orange, sunset lenses. Anyhow, all of that's to say that she said, "Finally, I went and looked back at my life and I had thought that my sleep was getting worse because of aging or menopause. When I backtracked, I saw that it was actually perfectly aligned with my increased use of screen devices, especially at night."

She said, "This is amazing. The difference in my life is phenomenal. Thank you, thank you, thank you." I just thought, "Wow, that's really powerful." We got dozens of reviews like this, people saying, "My heart rate variability increased 20% immediately." We have people asking me, even professional soccer players who are like, "Is it normal that I start seeing my heart rate variability getting better immediately?" I'm like, "Yes, it's normal because you sleep better. Your melatonin is higher, you rest well, and your cells are healthy. Your heart rate variability is a measure of overall cardiovascular wellness and so on. All these things improve when we have better-functioning melatonin levels and mitochondria." Those are some of the biggest psychological problems people will feel clearer, maybe more positive, and naturally have some more energy. Sleeping better is obviously a beneficial function. I love, for me, my favorite is the idea of having, let's say, more hope about just having a more positive disposition.

To me, that's kind of, I would say the ace up my sleeve or up anyone's sleeve if they want to use it. No matter what life throws at us, we can always change. I can't, so I can. My experience is that, and it could be a placebo, I actually couldn't say, but I believe that when you have a tool that you know it's working and you're seeing the results in your life, it gives a little bit more of the power to that I can. That to me is a really beautiful thing. Also, there's something to be said for improved brain chemistry, and increased dopamine levels that come with not only blue light protection at night and better sleep, but also, the other part of what we teach our customers is that, and it's included in the brochure we send out with our products, but basically how important it's to go out and get morning sunlight for 10 to 15 minutes every day in their eyes. Early as they can in order to set the body's circadian rhythm.

I'm sure you're familiar with this, which increases the body's production of dopamine, serotonin, also, melatonin actually, the production of melatonin. It's not released until night, but it enhances basically the production of the precursors, serotonin specifically. Getting sunlight definitely enhances our ability to be positive, proactive and motivated and all these things. That's something that also really fascinates me and I'm super committed to teaching about it. That's the main thing I typically focus on when educating, not just blue light protection glasses by this product or something like that, but the importance of sunlight overall for health and why light is relevant. It's a great question. Thank you for asking.

Dr. Wendy Myers:

This is one of the easiest things you can do. This is the lowest-hanging fruit in your health, just change your light consumption. You're talking like 15, 20 minutes in the morning of light exposure, and then the rest of the day wearing a pair of glasses, for some of the biggest improvements in your heart rate variability, which is one of the leading indicators of all-cause mortality. More than smoking, more than, I mean anything, diet, lifestyle, et cetera. You want to be doing things that improve your heart rate variability. This is one of the easiest things to do. It's easier than cutting out sugar or eating a paleo diet. It's just, you

wear a pair of glasses. Talk to us about some of the other implications or the research that we're ultimately beings of light.

Matt Maruca:

I love this question too. This is what I'm really now personally more passionate about, because to give the background, I had been applying this information about light and its relevance for multiple years. I had felt physically better, physically had gotten from being pretty skinny and pale to more tan and just feeling more alive in many respects. This was also in my ages, let's say from 15, 16, 17, if I had developed the way I was looking when I was 13, 14, 15, I probably would've been really pale, pretty skinny, sickly looking. Then as I went on the following years, I got really much more tan and healthy and stronger. It's funny, somebody commented, I recall at one point like, "Oh, couldn't that just be puberty?" I'm like, "Yeah, but all my other peers went through puberty." If they were skinny and pale before, they were still skinny and pale after. They might have just been a little bit bigger and more muscular and a little taller. That doesn't change from puberty. That's something with your environment, your health, your toxin levels.

What I was doing must've been having an effect. I genuinely thought about it. I was like, maybe I'm just psyching myself up that this whole thing is working when it's really not. Maybe I tried to grow out of this or that. No, it was clear looking at my peers that that's kind of how it works. That doesn't change just from growing up a bit so necessarily. Now, all these positive changes had occurred as I applied what I call the light diet now, but there was still a lot of, and I started a business, so that has its whole weight of its own. I skipped university and didn't go to college in the end because I had all this information from 3, 4, and 5 years of personal research, inquiry, and reading all these books. Something to do with starting a business, not having the certainty of a fixed path to follow, a career, or a job. People doing what I'm doing, who I can communicate with about what I'm experiencing. There was very little of that and still is.

I either had to get really upset or learn how to deal with it. I've been learning how to deal with that and creating my reality in a positive way. For a long time, I just got upset and felt lost and struggled. Anyway, the point is I had a lot of mental challenges, which I think are a normal part of life. I think many people deal with mental challenges. Like, how am I going to succeed? How am I going to reach my goals? How am I going to be fulfilled? I think these are the bigger questions that most people are asking at the deepest level. If they're not actively asking it, it's like their subconscious wants to know. Maybe if they feel like it's not being inquired enough, their life will create certain circumstances where they eventually have to look, like if they're ignoring it, and they might, who knows, get sick or somebody passes away and they realize, "Oh, my gosh. I've been ignoring this. I have to look." You know what I mean?

For me, it was just like I was brushing my emotional challenges, let's say, under the rug for a long time, and the struggle of how to face life growing into being an

adult. I think it's a normal thing to go through. Anyway, it continued to culminate as I got into my 21st year, I would say. Three years after starting the business when I was 18. I began to dive into spiritual teachings. I began to dive into the research of Dr. Joe Dispenza, for example, leading modern meditation teacher, but from a scientific perspective. The reason I was open to that information was, as far as I know, looking back on all of this, that I had spent all this time studying bio-electromagnetism, photobiology, and bio-photonics. Basically, the research from a Western scientific perspective is that our bodies are electromagnetic, our cells are electromagnetic. Effectively electromagnetism is electromagnetic fields are light. Our bodies are electromagnetic.

We're electromagnetic beings. In other words, we're beings of light, which sounds like a very spiritual esoteric woo concept. If you've read the science and you've read the book, the Body Electric or Light Shaping Life, or the Influence of Ocular Light Perception on Metabolism in Man, then all of a sudden, you say, "Wait a minute. We are beings of light." It made sense to me that maybe these spiritual teachers and spiritual practices who have claimed to be able to do supernatural things, like they've mastered this light within us, and they claim to be able to bi-locate and be in two places at once or have telepathy and read people's minds. I read books about this, spiritual masters with these powers. I thought this was either a total lie or my more curious part was like, well, how could this be true? Could it be?

Anyway, I started reading more, learning more, diving in specifically to the work of Dr. Joe Dispenza, because as I said, I think he's done the best job of taking the ancient wisdom of meditation and putting a language, developing a language of modern western science to explain it and how it works. As far as the implications to your question, I think the implications are massive. In fact, I know the implications are massive because within the community of Dr. Joe Dispenza, I've become a friend of his and the team, and they basically go around the world and do these week-long events and study the participants now. The blood, stool, all these things. I've gone to many of these events and basically, people are actually healing from really serious illnesses doing basically nothing else other than meditating. Changing their own energy field. Basically, cultivating their inner light, as I've called it for years now, and they're able to overcome serious illnesses.

It made sense to me that even though I had done all these different externally focused approaches, external light, changing my circadian rhythm, sunbathing more, and eating healthier, all of these had benefited my physiology. I was still choosing regularly to live in a state of stress, fear, and survival. Even if it was an unconscious choice. I say I was chosen because I don't want to blame that responsibility or put that responsibility on anyone else. I was still choosing to do that, and I still do sometimes. Nobody is perfect as far as I know every single day. When I'm unconscious and I go unconscious and go into that mindset that I want to be the victim, then I could go, especially back then, days and days, weeks, even months in a victim and stress mindset. I started to learn how to

become more aware of my mental state, especially using, that's the point of meditation. People will sometimes say, "Oh, I can't meditate." All that they're saying, as far as I've understood is, "I can't handle myself. I can't deal with myself. I literally cannot stand myself."

I have times like that too. There's been periods even recently, and sometimes for weeks or months where I don't meditate as much as I do in other periods, and I can see that usually I'm avoiding something. Usually, it's not like I'm stoked, everything's amazing. I just don't want to meditate because everything else is too good. It's more like, "Oh, no. I have to work. I have to do this." It's not avoidance because of being super stoked, but it's more like, I'm running away from something like that conversation you don't want to have with somebody, but you know, need to have it. I've done all that. I would say the implications are massive because we can literally heal diseases based on the research, just by changing our energy state. Not to say it's the only thing we can do. That's not the only cure, but a lot of the time I've come to believe many people's primary diseases.

Just to wrap this up, I looked at my life and thought when I turned 13, and 14 and got into the paleo diet and started thinking about healing my gut, then I got into light and light therapy and all this information about how I could use light to improve my health, and I started a company. This was all really great, and I always would say, it must've been the food that was the root cause of my health issues. The food and the toxins when I was in the world of food. Then when I got into the light world, I thought, it was the light, the blue light, all the TV I watched as a kid. All the Bluetooth and EMF, the wifi from all devices I was exposed to, that must've been it. It wasn't just the food, it was also this that made something wrong with me, and made me have these issues.

Then once I got to this spiritual, let's say, perspective and the energy centers, also known as chakras in the old system, I thought, "Wait a minute, all the issues I've had effectively in my health or had as a kid were primarily centered on my gut." Gut issues, indigestion, bloating, gas, constipation, whatever, all this kind of stuff. Then I had allergies, pretty bad, strong seasonal allergies, which if I'm totally out of balance and dysregulating my biology, I'll experience them, and they'll return. It's not like they just disappear necessarily, although they can if you truly overcome the issue. To get to the point here, the allergies and then headaches and migraines, which thank God I've never experienced at this point in my life. I used to get the worst migraine sitting in class, or in school, I would even vomit. It was so painful. Anyway, all of these generally are related to the gut at the core. There's a gut-focused issue.

Well, I thought about it, according to the ideas of Dr. Joe Dispenza and meditation and spirituality. If there's a lot of stress and fear, that has a super strong impact on the energy centers around our gut. If we don't feel stable, if we don't feel safe, if we don't feel secure, whether it's because of our parents or because of finances or lots of fighting going on, especially as a kid when you're

less may be guarded or you have less ability to handle that stuff, it goes really deep. Create this constant state of stress. That constant, let's call it imbalance in that energy center, would make sense. I started to think that my digestion wouldn't function properly if that energy center that's responsible for safety, security, and stability was constantly out of balance. It would make sense that my body wouldn't be able to digest things because I was in survival and stress. The body is not in a state to digest food and repair when we're under stress.

It made sense to me. All these other things I thought were the root cause. Who knows? Maybe I'll discover another root cause down the road that I'm not aware of. It seems to be getting pretty foundational, as you can imagine. What could be more foundational in my mind than looking within? I don't know how much further you can get. Anyway, that made sense to me. Maybe it was the fact that I had some personal challenges and family issues as a child that made me feel insecure that I was constantly worrying. Now, the key thing is to not get into that story of like, "I'm a victim." It's just like, the past is what it is, we can't change it. Joe Dispenza says, "I don't want people to relive the experiences they had. I just want them to learn how to overcome the emotions associated with that experience. Because when you have an experience without the emotional charge, it's called wisdom."

You have the memory without an emotional charge called wisdom, when you no longer have that emotional charge. Learning how to overcome the emotional attachment to that experience. To me, that implication is that we can all be free from our bondage if we're willing to make the effort to overcome it, which is a hard effort, which is why not everyone does it. Just like the reason, not everybody works hard and makes a lot of money or starts a successful business, because it's hard. Not everybody does it. A friend of mine always says in business, totally separate, but if it were easy to make a million dollars, everybody would be doing it. It's not that easy necessarily.

Dr. Wendy Myers: I was not expecting that answer. That's what I talk about a lot on the show is that we are energy beings. We have an energy field, and these frequencies of light affect us. The frequencies of our emotional traumas affect us. Those emotional traumas have an energy of frequency that lives in our energy field. Most of us are dealing with survival, fear, and all these things that dramatically impact our physical health and to have awareness of this. You can release all these negative frequencies to enjoy higher states of consciousness with that love and gratitude and joy and get to those. A lot was wrapped up in the show.

Matt Maruca: We covered a lot. This is great. This has been really great.

Dr. Wendy Myers: Yes. Why don't you tell us again what your website is if you have any special offers for my audience and anything else that you want them to know?

Matt Maruca: Absolutely. The website's Ra Optics, so raoptics.com. If people want to purchase the glasses, they can go to raoptics.com. As far as a special offer, I'm not exactly

sure, but I believe we may have a unique discount code for you, which would give your audience 10% off. If we don't, we can easily make one. We can extend that to your audience and we could make it, let's put it in the show notes, but I'm going to guess Myers Detox would probably be the code or whatever you prefer it to be.

Dr. Wendy Myers: Maybe we'll just do Wendy 10.

Matt Maruca: Wendy 10, exactly.

Dr. Wendy Myers: That would be easy to do.

Matt Maruca: We can absolutely do that. I'll follow up with you after. This is something people can use. Then as far as finding the company on social media, that's ra_optics. That's R-A, no W, ra_optics.com. Pardon, not dot com, just ra_optics on Instagram. Then on Instagram, if somebody wanted to follow my page directly, my personal page, it's The Light Diet. That's where I share more about myself, my adventures and things I'm doing. As I mentioned before, I'm on a spiritual pilgrimage at the moment, also running my business. The challenge was, can I do both? I know I have 16, 18 hours of waking consciousness in the day, and that's more than enough time for me to work and how much I want to work. I'm not a believer in overwork and over-push yourself. I'm a believer in the 80s and 20s and sometimes less is more and smarter, not harder. I'd rather work four or five hours in a day and be really efficient than eight or 10, which I've done more for a long time, be really inefficient and really not get anything done and only feel more miserable and worse.

I'd rather do that, and then I'm like, well, if I'm working four or five hours a day, realistically, I end up doing more, especially when I'm in one place. I thought, well if I'm walking five or six hours a day, that's not only really healthy, but it's also giving me something else to focus on, another goal that's good for me in addition to my work. That's something that I've been kind of experimenting with going on a pilgrimage in Spain, as I mentioned to you. Really cool. I share a lot of those adventures, and I'm working on a vlog, like a diet vlog. I don't know what I'll call it in the end, but probably something like the Light Diet Vlog so people can follow the different things, certain science stuff, and certain just cool information about history and life and light and so on. Anyway, people can find it on The Light Diet on [Instagram](#), and I'll share all of that there.

Dr. Wendy Myers: I love that. I love it, The Light Diet. That's fantastic.

Matt Maruca: Thank you.

Dr. Wendy Myers: I'm going to follow you as soon as we're done with the show.

Matt Maruca: Awesome.

Dr. Wendy Myers: Thanks so much for coming on the show and sharing your knowledge about light and how it affects our health. This is a topic I love discussing because it's so important, it's so easy to implicate. It's one of the easiest things that you can do. Thanks for coming on the show. Everyone, I'm Dr. Wendy Myers. Thanks so much again for taking the time and listening to my show every week. We're nearing the 500th episode, which is just thrilling. I've been doing this for so long, and I just love all of you guys for staying with me for so long. I love what I'm doing. I love bringing experts from around the world to help you and give you all those tools that you need to upgrade your health because you deserve to feel good. Talk to you soon.

Matt Maruca: Amen. Thank you so much, Wendy.