

Michael:

It says we're live. Hello, I think.

Eric James:

Hello.

Michael:

Hey. Hey, everyone. I'm Michael, I'll be your host of this webinar. We're going to be talking red light therapy with my guy here, Eric James. Eric, thanks for joining us.

Eric James:

Absolutely, thanks for having me here. I'm excited to share about different types of light and red light therapy specifically.

Michael:

Yeah, it's going to be. This is a really interesting topic that I said in one of the emails to our audience that I feel like I was kind of behind the curve a little bit. Here, we try to get out ahead of anything that's new, or exciting, or coming out, or happening, but honestly, the first time I had heard about red light stuff I didn't really believe it because I didn't understand how it worked. I didn't understand the... it didn't make sense to my brain. I was like, there's no way that this could do this, so I kind of put it on the back burner for a while until Ari's book came out and that got my attention. I was like all right, if he's writing a book on this, this has to be pretty legit. Then I got his book and then that led me to you and your company and the device that you make. I was a little behind the curve on this one, but I'm excited to be getting caught up.

Could you share with your audience just a little bit... with them, first off, I want to do a check. Can everybody let us know in the chat that you can see and/or hear us. I went through a five day battle with my internet service provider last week to upgrade my internet speed to super fast so that we didn't have issues because the last couple webinars we had some skipping issues. When I was talking to Eric before we came on he said my head and my video was sideways for him. Am I vertical and right side up, or am I sideways to you guys? If you lose connection I would say definitely to refresh the browser and/or close, then reopen from the email, the same link. All right. Loud and clear, it sounds like we're good, all right. Now that they can hear us can you... right side up, all right good. It's just your computers being weird. Can you share with them just a little bit about how you got into red light therapy as a whole?

Eric James:

Absolutely, yeah. I've kind of had a roundabout path, but the very first time I was exposed to it was my step-mom had nerve pain, neuropathy, in her feet to the point where she was wheelchair bound most of the time. She tried just about everything that she could find, then she had these custom red LED light boots made, basically, and this was in the '90s, like early '90s, so she was way, way ahead of the curve on that and it was one of the only things that she found that could actually help. I didn't have the heart to tell her that it was probably just placebo, but it turns out that it's not and there's really something going on. That was my first introduction, I was always curious about it. Then, as I'll cover in the slide show a little bit too, but I had some health challenges and then other family members had health challenges.

When I would research and really dig deep into what's working and not working for these certain things, lasers kept coming up and that just sounded kind of cool to me. I'm like, what is that? How is that working? It was such varied things from my wife had thinning hair, to my mom had battled with MS, and my dad was a low

blood platelet count. These things that don't seem related at all, but would all had some research about red and infrared light in lasers and positive results. I was very, very curious, then just did a deep dive into that. Then basically saw the potential, except for the expenses was so high that I couldn't even buy a device. I was thinking if this is as good as it sounds, I want to do my whole body in this red light. At the time, all I could find was a \$120,000 full body light bed thing. So I decided-

Michael:

Only \$120,000?

Eric James:

Yeah, that's it. So I bought a couple... No, I'm just kidding. Yeah, I couldn't afford that so I just started prototyping. My dad's an electrical engineer, like a PhD, Stanford guy, so I totally understand electronics and we would modify all of my toys when I was little and everything, definitely love messing around and creating prototype electronics. I already had the prerequisite skills to produce a red light device, so I made my own. Then my friends all wanted one, and kind of the rest is history. I decided to start the company, so that was two years ago that we started the company, then we've come out with two products and we have more in the pipeline as well.

Michael:

Very cool. Yeah, we got ours about six months ago. I'll flash it on later, but I actually have it here next to the computer. A couple people are having a sound issue, so I'm not sure. I apologize folks, I hope that a majority of people have good video and audio connection. I did upgrade to the fastest internet on the planet this week, so I know that it's not my internet speed. Hopefully that irons itself out and you can try refreshing and hopefully that will iron itself out. Do you want to go to your slides and Eric's got a presentation, he's going to share some pretty awesome research and information about red light therapy, and you mentioned lasers too. We've had on Dr. Kirk Gair, who's talked a lot about low level... he uses low level, cold laser therapy, more targeted for various health issues. We just did an autoimmune masterclass a few months ago and he came on and talked about using lasers to lower antibody levels and all sorts of crazy stuff. Yeah, lasers would get my attention too.

Eric James:

[crosstalk]-

Michael:

But this is different, so you're going to talk about different types of light, correct?

Eric James:

Absolutely, yes.

Michael:

All right, cool.

Eric James:

I'm going to talk about light as a nutrient. Let's get into this, then [inaudible], who is a part of team, she should be in the chat, so if you have questions as we go she can help answer in the chat. Yeah, hopefully everyone's

got good video and audio, but yeah, let me go ahead and turn the screen share on. Let's see... Okay. You got the screen there?

Michael:

Yep.

Eric James:

Okay, awesome. Yeah, I kind of already did the introduction, so I'll just kind of move on. A little disclaimer, this information provided in good faith. But obviously, you'd need to talk to your physician if you have something going on, anything that you decide to do is at your own risk. The main concept here that I want to kind of start with is that light is a nutrient and that the human body absolutely needs light to be healthy. If you're watching this, then so do you. We kind of think about light, or a lot of a people don't yet think about light as a nutrient but it absolutely is, and it's one of the big foundational things that changed in modern society is the different in how we interact with light. Obviously, people get that food has changed with processed food, but light has changed a lot as well. That's part of what I'm getting into today. Let's see. I also just want to say that you are in the right place. I believe that you are on this webinar for a reason, because our bodies and minds naturally guide us to what we need most.

The fact that you're here matters to me and I don't take that lightly. I just want to start out light literally... the reason it's so exciting, the reason I started a company around it, is that light literally has the power to increase your cellular energy production which makes you overall far more energetic, has impacts on mood, and much more. The health benefits of light can not be overstated. If you get one or two powerful ways that you can get these light nutrients back into your daily lifestyle that make a difference in your health and the health of those you love, then I know I did my job today. I want to start out by making this really real for everyone who is watching. The way to do that is to take a moment and let's just listen to our bodies and minds and where are you specifically in your health journey? What kind of challenges do you have going on? What could be better? What do you want to optimize? What does your intuition say would be best for your overall health?

I'm going to give you my all, in exchange, I ask you to really think about this presentation from the perspective of your life and your body because that's what's going to make it real and valuable for your real life, not just some concept you heard about one time, which I think we can all associate with as far as health stuff goes. I talked about my story a little bit. I dealt with asthma, anxiety, hemorrhoids, acne. My wife with thinning hair, eczema, and stretch marks from being pregnant. My step-mom, I mentioned the neuropathy in her feet. My dad had the low blood platelet count. My mom still battling with MS. Then my sister has a connective tissue disorder where there's not enough collagen. I got extremely curious about health because my family and I were always sort of sick or had something going on despite doctors' advice. We weren't able to necessarily get the help that we wanted. I figured I must be missing something or we were broken somehow. Are we genetically is something wrong?

I started researching everything I could possibly find and for all of these that I mentioned there's many factors involved, but when I researched each one I kept running across the common denominator I mentioned, which is there are always studies showing positive results using red and infrared light. From producing more collagen, to healing hemorrhoids, to regrowing and thickening hair, to removing stretch marks, improving nerve function, improving brain function, improving blood flow, improving mood, acute pain relief, long-term pain relief, and even a study from Harvard on increasing blood platelet count. I thought how the heck could this be possible? These seem so unrelated. I became obsessed and eventually decided start my red and infrared light therapy company to help push down the high costs that had typically been associated with these light therapies.

I am going to get into exactly how this works and what red and infrared light does, but first, we need to zoom out a little bit, so I want to talk to you about all the different wavelengths of light that have an effect on the body, not just red and infrared light. As far as culturally, we're starting to untangle the web of what's causing these problems like fatigue, chronic pain, mood disorders, obesity, thyroid disorders, et cetera. We're figuring out that a lot of these problems come from the weird ways we're living in modern life. One of ways is that we're inside almost all of the time. Even the people that I know that are very athletic are inside still the majority of the time, when we used to be outside all of the time for most of our history as human beings. Very little... We get very little sun now, or we get way too much on vacation, versus we used to get sun exposure every day and on all parts of our body. We also used to spend evenings around the campfire instead of the TV.

That seems like a small difference, but if you really stop and think about how good it feels to cuddle up in front of a campfire, there's a reason it feels so good. Did you ever notice just naturally looking right into... you just naturally look right into the flames of the fire when you're camping? Both sunlight and campfires have very important wavelengths of light, including red and infrared. The big hint is this, you need to get enough light to all body parts, including the private ones, in the right quantities, in order to be optimally healthy. To make this happen in our modern lifestyles, we end up needing to buy some gadgets to help us get the nutrients we need since we live in such a weird way compared to how our bodies were designed. Let's talk about light as a nutrient. There's sort of five categories, five main categories, the five nutritious types of light. There's blue UV, far infrared, red, and near infrared. Blue light is the one that people are maybe the most familiar with, and blue light kind of gets a bad rep, but it's actually really important. For example, in the morning, getting blue light is very good for setting your circadian rhythm. We know a lot of people now are aware you're supposed to avoid blue light at night, but you actually want it during the day.

It also promotes neuro transmitters, hormones, and affects mood in a positive way. You need blue light, of course, it does have the cons and ones that people may not know about is that it can actually damage your eyes because the eye is not very good at blocking blue light. Blue light exposure may increase the risk of macular degeneration. Blue light contributes to digital eye strain, and blue light at night causes melatonin problems by stimulating the pineal gland and can cause trouble sleeping. This is where the amber colored glasses come into play that you see people wearing these days. Now, the next type of nutrient is UV light, again UV light gets a bad rep but it's actually extremely important. The main source of UV light that we get is sunlight, which is awesome because it's free. Vitamin D deficiency can cause huge health problems. UV actually strengthens your immune system, your bones, and your muscles. It reduces depression, prevents diabetes and obesity, fosters normal cell growth, and helps maintain hormonal balance. UV light actually helps some skin conditions such as psoriasis, even though a lot of people think they need to avoid UV light for their skin. It reduces the itchy, scaly skin patches associated with that.

Finally, UV light stimulates melatonin production, thus helping reverse seasonal affective disorder, regulate your mood, and enable a regular sleep schedule. UV light, most people don't think has an effect on their circadian rhythm and their sleep, but it absolutely does. It's also worth noting that it's very important to get actual sunlight not just vitamin D. Vitamin D tablets are not an adequate substitute for the real thing. There's been some studies that show that there's a gap that we don't yet understand between when you're getting from sunlight versus just vitamin D pills. Obviously, UV light has some cons, which is that too much is very harmful. A sunburn is obviously a bad thing. It, in the short-term, causes lowered immune response and skin damage, which in the long-term can actually lead to skin cancer. While too much is bad, none is bad as well.

It's all about the correct amount. It's all about balance, which makes sense, right? One other negative factor is that because you don't want to get too much UV it ends up being hard to get enough of the other wavelengths of light from the sun that you need. Because we've kind of been taught to stay out of the sun to prevent getting a sunburn, we're not getting the rest of the spectrum that I've been talking about and that I'm going to talk about in the rest of the presentation. That's probably the biggest harm done by this avoiding of UV light. The

next type of light that you may be familiar with is far infrared. This is kind of like the heat that you feel from the sun. If you're standing outside and a cloud moves over and blocks the sun, and it gets cold, it didn't really get dimmer, it's the same brightness but it got a lot colder, what's blocked is the far infrared. When the cloud moves, and the sun comes out, and it feels amazing, the reason it feels amazing is that far infrared and your body loves it. This is what infrared saunas are.

Far infrared is very good for you to improve circulation, provide stimulation to your cells, relaxation. It can be good for pain relief. If you have an infrared sauna, which I do, they're fantastic, but red and the infrared, I'm going to show you, are entirely different. It's going to give you complimentary benefits, but different benefits. A lot of the saunas that have red and the infrared light, they're starting to add it in, but it's at about a one hundredth of the amount that you'd need because you can't have that powerful of LEDs in a sauna, because the heat will burn them out. All right, now finally on to the game changer-

Michael:

Yeah, we did a webinar on infrared saunas last month. You can see mine in the background, probably. That was actually talked about, people had questions about that because they said a lot of companies are starting to market, "This is full spectrum." Or, "This has red light." Or, "This has near infrared." The sauna expert we had on, and the guy who's the founder of the company that made my sauna, talked about just that. That you can't... he loves red light, and loves near infrared, but that you can't but the adequate powered lights in a sauna like that because the whole thing will be a catastrophe. It's a good effort, it's a good idea, but in practice it doesn't really work, so what I personally do is I do about a half hour in there, then a quick rinse shower, and then 20 minutes with this. That's my infrared routine.

Eric James:

Oh, I love that. We do have a lot of customers who... most saunas have a glass door, or at least a window. You can absolutely shine it from the outside in, through the glass. The red and the infrared go right through the glass into the sauna.

Michael:

Really?

Eric James:

You can use it together, but you just can't bring it inside, it just can't be hot.

Michael:

Well, that could change everything. I didn't know that. All right, well, I'm going to have to figure out how to do that then, because that'll cut down some time. I didn't know about glass, because glass, when you're talking about UV and different lights from the sun, glass blocks some of them.

Eric James:

Yep, absolutely, but the red and the infrared go right through. That's a good question, though.

Michael:

Oh, good to know. I'm glad I spoke up. All right.

Eric James:

Totally, totally. Yeah, feel free to interrupt me, too.

Michael:

Yeah. No, I haven't had anything valuable to say, but all right. That's really good to know, so I'm glad I did. All right, go ahead, I'll get out of the way.

Eric James:

Awesome. All right, on to the game changer that we're here really to learn about, that's red light therapy. Ari Whitten talks about this in his book, and I just love the concept of this. If a pill could stop and reverse the aging process, increase collagen, boost energy, increasing fat loss from exercise, dramatically reduce cellulite, fight hair loss, reduce inflammation, decrease pain, speed healing, and optimize brain function, it would be hailed as a miracle drug. It really would be, I mean, there's nothing out there that could give you these-

Michael:

That'd be worth a billion-

Eric James:

... kind of results.

Michael:

That would be on every shelf, at every store, everywhere, and people would be popping hundreds of them.

Eric James:

Yeah. If you look at this list, a lot of the things that we do have solutions for, or sort of partial solutions, or don't really work that well, or have bad side effects, or something, so the fact that it could do all of these things, yeah, it would just be an absolute miracle drug. The crazy part is it does exist. It's just not a pill. It's not something that pharmaceutical companies can bottle up, it's actually just red and near infrared light. It's one of the biggest health discoveries of the last half century. I know that's a big statement, but I believe that it's true. The big problem, why it hasn't been more widespread, was it was very expensive and it required high powered lasers. Like I mentioned, it was multiple hundreds of thousands of dollars up until very recently. How could something like this possibly exist? Now that we know that it is real, and it does exist, how could something like this have this many positive effects that are this varied? How is this even possible? Well, it makes perfect sense once you see what it is and how it works. Not just at the cellular level, but actually inside of the cell at the mitochondrial level. I hear that this audience loves their mitochondria and knows what that is, so that's awesome.

Michael:

Very true.

Eric James:

Out of the whole light spectrum here, you've got radio waves, micro waves, infrared, and then invisible light, then ultraviolet, x-ray, gamma. There's this whole spectrum. The visible light you can see there is a very small part of the spectrum, then what we're talking about, the red and the near infrared, are right at the edge of visible. On our devices, for example, when you flip the red switch you can see the red, but it's almost at the

edge of what you're able to see. Then the near infrared is just barely outside of the visible spectrum. It's right at that edge where they meet where there's some very special things at play.

What is so special about red and infrared light? Number one is that it moves through tissue. I don't know if you guys do this, but when I was a little kid and you're playing with a flashlight and you put it in your mouth and it shines through your cheeks, and you can see the red light coming through your cheeks, or your nose, or whatever and it was so funny. That's actually red and the infrared light, red light specifically because you can see it, I guess, but red light going through your tissues. You can try this with a flashlight or even the flashlight on your cell phone, which is what this picture is, just my iPhone and it has blue, and green, and all of these other frequencies, but the only thing that makes it through is red, and that's why you see red.

Michael:

Oh, that's interesting. When I was a kid I thought it was because of my blood.

Eric James:

Yeah. I know, right? It makes sense that it would be your blood, it's actually just because all of the other [crosstalk]-

Michael:

The blue and green light gets blocked by the skin.

Eric James:

Yeah, it stops immediately at this level of skin, so it doesn't get deep into tissue. Even if it had an effect on your mitochondria, it could never do it because it can't get there. 660 nanometers, which is red, and 850 nanometers, which is near infrared are special in their ability to move deeply into tissues. This is how red and near infrared light can actually reach the cells inside of your body to have an effect in the first place. The second way, there's a second thing that's different about red and infrared light is their bioactive wavelengths. These are the wavelengths that have the ability to actually increase cellular energy. For a little biology refresher, for those that need it, the mitochondria are the little power plants and engines inside of each cell of our body that take in food and oxygen and produce energy so you can do, well, anything at all. Life as we know it would not be possible without these little guys giving our cells the energy they need to do their jobs, important jobs, like maintaining your heart, your eyes, your brain, your skin and everything else.

Well, it turns out that mitochondria in your cells are highly responsive to red and near infrared light, and it stimulates them to produce significantly more energy, which is a very good thing. How were these effects discovered? How did we get from sunlight to actually understanding that this effect happens with red and near infrared light? There's a simple but profound discovery, soon after lasers were first invented, literally two years after they were first invented, Dr. Mester was testing shining lasers into hamsters to see if he could help remove tumors. He was looking at it as an anti cancer type treatment, but he first shaved the hamsters so that the hair wouldn't block the light so that it would reach inside the body. What he found was that even though it wasn't what he was initially testing for, the hair grew back much faster on the hamsters treated with the laser than those without. That was a spark which started a growing research interest in red light therapy. Like a lot of things in science he was looking for one thing and something completely different happened. He was like, "Why did the hair grow back faster when they were exposed to this red light?"

Michael:

I think most of science was an accident.

Eric James:

Yeah, I agree.

Michael:

Because usually they're trying to figure out something and running an experiment on something, then they notice something else and then it changes the whole... yeah, we've... that's about half of the webinars we've done, somebody figuring out something on accident.

Eric James:

Totally.

Michael:

But if you're not trying to do something, you're not going to figure out the accidental things either.

Eric James:

Yeah, you still have to go for it, right?

Michael:

You've still got to go for it. All right.

Eric James:

Kind of the next major step in the story was in the '90s NASA was looking for ways to maintain muscle and bone mass, which is lost when you're in space, and also treat chronic wounds should something happen in space. There was already a lot of research on this, but the NASA research and testing really helped pave the way for much more and really validate the ideas. After that, there was an explosion of research, which continues today. There was over 5,000 studies done all over the world with literally dozens of new studies coming in every single month. If you email us we can send you a spreadsheet. There is a team of people that... literally a team of people that just keep up with all of the new studies, and categorize, and list them all. We would be happy to send you that access to that spreadsheet as well, it's pretty incredible. Yeah, through this research many more applications were discovered and it grew pretty much into its own industry in certain specific areas. You might have heard of cold laser, or LLLT, low level laser therapy, body contouring, laser fat removal, laser skin resurfacing, these are some of the more popular actual commercializations of this technology.

Michael:

Yeah, and most of those things either cost a ton of money or you have to buy... I looked at a cold laser device because after I met Dr. Gair and he started telling me about what he does I was like, "Dude, I need one of those." Because I have concussions and it's really effective for treating the brain, and then the device itself was a little bit out of my price range. That's, I think, a big difference between a lot of the medical type lasers and lights and what you guys do.

Eric James:

Absolutely, absolutely. As you kind of hint at, the primary industries for this technology have been doctors, dentists, health practitioners, anti-aging clinics. The problem is the extremely high cost lasers. If you're not going to buy one yourself, which most people wouldn't even have considered, because it's this medical piece of

equipment, the high priced, inconvenient treatments that require a visit to the practitioner are an obvious obstacle. It's \$250 per treatment and you have to actually go into the office to get this treatment done. It's just not something that you could ever really imagine doing every day. Yeah, so that's kind of the history up until this point, but how does it work? What causes the positive effects that we've talked about? The mitochondria in your cells, which remember are the power plant of your cells, get gummed up and stuck with nitric oxide where oxygen is supposed to go. Remember, the mitochondria combine the food and the oxygen to produce ATP and energy.

Well, if they're gummed up with nitric oxide instead of oxygen, they get stuck and basically start running poorly like an old engine. There's actually the mitochondrial theory of aging, that this is where aging comes from. When mitochondria are gummed up, there's less energy for the cell, and then on up the chain to how much energy you have, and even how you feel because energy is all about the mitochondria. How well would your car run if you never change the oil? That's what's happening with most people without proper light exposure in our modern world, they are literally gummed from the mitochondria on up the chain. What we do want is a clean engine. Also, I just want to say for a second too because people have asked about this, nitric oxide is good in the blood stream. You might have heard nitric oxide referred to in a positive way, and then I'm referring to it in a negative way. Nitric oxide is definitely good in the bloodstream, but it's bad when it gets stuck in your mitochondria.

Red and near infrared light work by actually knocking the stuck nitric oxide out of the mitochondria so oxygen can get back in there like it's supposed to. It's a fresh, clean engine with plenty of energy to do its job. More cellular energy, more organ energy, more bodily energy, anti-aging energy boosting, just think about this conceptually. Would you want your cells to have less energy than they need to do their job or more energy than they need to do their job? As far as the analogy of the clean versus dirty engine, what does your common sense say would lead to more aging and health issues, versus which would lead to better overall health and well-being? I think the answer is obvious, right? We want a clean engine. The other thing that happens is that the actual red and near infrared light charges the membrane and actually changes the membrane potential of the mitochondria itself.

To put it simply, it literally charges up your mitochondria in your cells. Again, since your mitochondria are like a battery, plus an engine, the more charged up, the better. There's actually a measurable potential change of the membrane of the mitochondria, which is pretty incredible. The number three way, actual effect that red and near infrared light have, anti-inflammatory. Red and near infrared light work by changing the macrophages from the inflammatory to the anti-inflammatory phenotype. This is a big deal as we've all heard the problems that inflammation can cause in the body. To be fair to inflammation, it's not all bad. Your body is having an inflammation response for a reason, and it's actually good in the short term to protect your body. But it's definitely bad if it gets stuck that way, or it's like that way all of the time. Red light therapy can be a really good way to help switch this... flip that switch back the other direction. Combining this with having a clean engine with plenty of power, it's an even bigger deal. Now cells have tons of energy, and they're not fighting against inflammation to get their jobs done, with health for example.

The fourth way that it works is through hormesis. It's actually like a little... when you're doing red light therapy it's a little workout for your cells. It stimulates a reaction to strengthen and increased collagen and elastin production occurs because it's a slight stressor on your cells. Stress can be good or bad, when you go to the gym, right? If you way over-do it, obviously that's not going to be a good thing, but if you have the right amount of stimulation, or right amount of stress on your muscles, you're asking them to do more than they currently can, they will respond with a reaction to actually strengthen. Your skin cells and the other cells in your body will actually do this as well. They'll either choose to die, which is a good thing if they're weak, you actually don't want the weak cells around, or if they can handle the stress but they want to be stronger to be able to handle it better next time, they will actually strengthen and you'll get positive effects from that. People are really into

collagen right now and actually eating it, and drinking it, and all of these things. But you can produce collagen in your body. Red light therapy is a way to get an increase in collagen naturally through your body doing it instead of having to actually eat or drink it.

Michael:

The collagen and elastin is what makes us have wrinkles and droopy skin when we get older, correct?

Eric James:

Yeah, the lack of collagen and elastin.

Michael:

Yeah, lack of collagen, lack of elastin.

Eric James:

Yep, totally. Yeah. A lot of the anti-aging effects [crosstalk]-

Michael:

There's a lot of very expensive therapies out there that people are paying to do something that red light can do.

Eric James:

Totally. Totally.

Michael:

And dangerous, expensive and dangerous. I'll put that.

Eric James:

Yeah, and there are some, you know sand, people sand their skin to get it to react because that's a stressor too and stuff, but personally, I'd rather stand in the light than have my face sanded but I'm sure there's benefits to that, too. It just doesn't sound good to me. Yeah. If you start thinking about this and the combination of how these other things all work together it's a very, very powerful combination. It's not going to suck nitric oxide out so oxygen can get back in there. The membrane potential is being charged. It's anti-inflammatory, and it's a hormetic stressor that's actually strengthening each cell. When you have trillions and trillions of cells in your body, and you're having this effect on each of the hundreds of... tens of thousands or hundreds of thousands of mitochondria in each of those trillions of cells, you can see how it could be a very powerful effect over time and up the whole chain of your body.

Let's talk about what are the actual results from red light therapy and look at some example studies. Studies with positive results include aging, fat loss, muscle gain, skin smoothing, wrinkle reducing, for some of the reasons we just talked about, brain optimization, regrowing hair, increased fertility, reduced pain, reduced inflammation, speeding of healing. In a lot of other countries, if you have an injury, like you got cut by some coral, or you had a injury on your skin in Japan or in Australia, they will actually just shine a red light, when you go into the ER they'll put a red light on you. They've been doing that for a really long time. There are certain other countries where this isn't that weird. Australia is our second biggest market because people totally get it and they don't need convincing because they've been around it. It's kind of interesting that the U.S. is behind a little bit in this.

Michael:

Well, it's not a pill. You would need to put the red light in a pill.

Eric James:

Yeah, then people would buy it, right?

Michael:

Some sort of pill you swallow and the red light emanates out from the pill through your body, I don't know.

Eric James:

Yeah. I wouldn't be surprised if someone made that, you know?

Michael:

All right, good luck.

Eric James:

It can increase performance, which I'm going to show an example of that one in a second, boost energy levels, improve mood, improve sleep, improve metabolism, hormonal health benefits, it can reduce macular degeneration which is the number one cause of blindness, and many, many more. Let's look at just a few examples. We're going to start at the kind of base level, then go up. This was in The Journal of Lasers in Medical Sciences. Basically, it's talking about the biological effects of low level laser therapy, like really what's going on. Mitochondrial increase in ATP production, increased cell proliferation, so your cells will actually divide easier. They were basically researching to find out if the theory about the [inaudible], which is where the oxygen binds, was correct. Just to read this I think this is telling. It says the use of low level laser to reduce pain, inflammation and edema, to promote wound, deeper tissue, and nerve healing, and to prevent tissue damage has been known for almost 40 years since the invention of the laser.

The study is starting with the assumption that all of these things are already true and have been known about for 40 years, which is pretty wild when you think about the general population and we're just learning about it now. This review wasn't to check if that was true, because there's already been thousands and thousands of studies that have shown that, but it was actually to see if the theories about what was happening in the cellular mechanisms responsible for those effects was what we expected, pretty incredible. Then we'll move up the chain now to some more systematic effects that then come from that same thing. Here's a study that talks about skin anti-aging, reducing wrinkles, reducing skin roughness, and improved perceived skin beauty, which is pretty cool because they actually had, when I looked, actually read into this study, they had people judge the skin beauty factor of other people they didn't know before and after and then the perceived skin beauty went up. I thought that was kind of an interesting finding, but they also tested the skin roughness and ultrasonically measured collagen density, so they had some subjective and then some objective measures of the benefits of this, which is pretty cool.

Michael:

Skin aging, skin wrinkles, skin roughness, skin beauty is another trillion dollar industry right there. That's actually be the thing I've noticed the most in the use of it is people asking me, "What do you do for your skin?" I honestly... I barely ever even wash my face. I don't do anything, I don't put anything on. Since the sauna helped a lot when I first got that I think it kind of clears a lot of things out, then the red light kind of took it to another level where people ask me all the time, "What do you do for your skin?" I'm like, "I honestly don't do anything. I

do the red light and the sauna." I used to have, I don't know if I want to call it eczema but kind of like bumps sort of, at times, on my back and my arms that were like itchy sort of-kind of and those are all gone ever since we got that too. I think the skin has been the most dramatic perceivable benefit that I've had. My wife loves it. It's on her face at least 10 minutes a day.

Eric James:

Wow, that's awesome.

Michael:

Yeah. I thank you because it's replaced a lot of expensive lotions, and potions, and things.

Eric James:

Yeah, you got it. That's one of my favorite things about starting this company is that my wife has no stretch marks or anything from being pregnant and her stomach looks like it did before, that was something that we didn't really think was possible so she's like, "Thank you for doing that. That's pretty cool."

Michael:

Wow, that is impressive. Now, we're not making medical claims, we can't promise that the red light will remove any scars or any anything, but you're not the first person I've heard that from. When I posted in our Facebook group a while back somebody had said that it really helped with that for them, too.

Eric James:

Yeah, totally. That's a great point. My wife had eczema on her arms too and in one treatment it went away. But then, that's not typical. There's studies on eczema and it does help, but it doesn't necessarily always go away after one treatment. The results may vary kind of thing, but it is pretty incredible when you have those... because some of the systemic stuff you can't nail down, but some of the skin stuff you can literally see it. It's nice to have something where you can tangibly see the result. Let's see here, study number three, this is talking about the effectiveness of, photobiomodulation, is another way of saying red light therapy. That's the newer science term. It was LLLT, now it's photobiomodulation. That study basically showed that there was a pain threshold was improved, there was reduced fatigue, reduced depression, and an improved quality of life, and that it was even better when combined with exercise, which is pretty incredible.

The way they did this was with the standard FIQ RDC scores, and that the quality of life was improved with phototherapy and it was improved with exercise, but the combination was really something amazing. There's other studies that show a lot of performance gains when you combine the two. There's certainly something about other healthy habits combined with red and near infrared light, sort of they amplify each other better than either one alone, which is great. I think this is kind of all summarized. It's not enough time to go into the detail about every single thing, but here's a quote from Dr. Michael Hamblin of Harvard Medical School to summarize. Photobiomodulation, aka red light therapy, is more than an alternative kind of medical treatment. It is a whole new method to control cellular processes. It can be used to fight against diseases and other disorders in both human and animals. This is, again, a renowned PhD, Harvard Medical School researcher. I would invite you to definitely look up interviews with him, or some of his books, or if you're skeptical about some of this that's a good person to look at.

Also, he's behind the big shock to the industry that we've been hinting at, which is that it turns out expensive lasers are actually not needed and that any light that's at the right frequencies has the same effect as lasers at those frequencies. For a long time people thought it was something specific about lasers, but it's not. LED

panels are starting to take over because you can make them for a fraction of the cost and have them at home, and no more \$250 per treatment and having to go into an office for this kind of thing. I absolutely believe that red and near infrared light set to go mainstream, which is why I started a company around it. This is something I want to contribute to and I believe that everyone will have a red and near infrared device at home, it will be normal just like you have a Band-aid at home, whatever, you have a red and near infrared light device and they're affordable enough that it makes sense. Our goal as a company is to be the leader as that transition happens with the highest power, highest quality, lowest price and just non-stop innovation to make better and better products as this whole industry evolves.

Michael:

Yeah, and that's how I ended up with your device, was actually Ari's book and Ari, for those who are watching, Ari's been in our film project, human longevity project, and I'm actually hosting him on a webinar next week, which we haven't announced yet. If you watch the replay on this, that may be irrelevant, the dates, but next week from this filming we're going to be talking about mitochondria and energy and Ari is one of the most ferocious objective researchers of anything that I've ever come across. Kind of one of those people where if I see him into something I'm like, okay, well that just saved me about 200 hours worth of research. And oh, he wrote a book on it? Perfect, let me skim. I'll be honest, I opened the book and I went straight for which device am I supposed to get? I didn't even read the stuff. I read the intro and it said this, this, this, this, anti-aging, mitochondrial, energy production, exercise recovery, skin, I got halfway down the list and I was like, "Okay, done." Back to the index, look up where are the devices?

He purchased a whole bunch of different devices, and he tested them all out. He tested the power output, he tested a whole bunch of different things about the devices, compared it to the cost, the price, value per measure of light output, it's pretty in depth what he did. Yours was pretty far and away for what you get, it's the best price. There's bigger devices, there are also exponentially more expensive devices, and there's probably a lot of good ones on the market at this point, honestly. I like to be as transparent as possible on any of this stuff, so I'm not saying your device is not the only red light and near infrared device that anyone can ever get and it's the only one that'll ever work, there's some other good stuff out there. But for me, personally, it was the best mix of powerful output, reliably built, this thing's solid as hell, I dropped it on my foot once and that sucked, but powerfully-

Eric James:

You can use it to heal that.

Michael:

Probably, I could. Powerful output, reliably built, great value, you're very easy to deal with on the backend of things that people don't see. Your customer service is really attentive and good. I was having an issue with a clip on it and I had one in less than two days after I emailed Eric, a replacement. It's a great, great company. That's why I personally chose it, and I honor your mission to try to make the best device that you can and keep it at a reasonable cost because I agree that this will be something that's in everyone's home that is a health conscious person who's, especially for training. If anybody out there is into any sort of martial arts or training, I just restarted learning to surf this week so I hurt in all of these really weird places that I didn't know a body could hurt, so I'm doing a little extra sauna, a little extra red light time, and I'm going Sunday, Monday, and Tuesday next week, surfing, and I'm going to have to turn up the dial.

But this thing is such a cheat code for that because it enables someone like me who's 39 to go get my ass kicked in the ocean for two hours multiple days in a row and not be gimping around, and wounded, and unable to play. Between the mitochondrial and energy benefits, we have a ton of people with chronic fatigue in our

audience for various root causes of that fatigue. We have a lot of autoimmune people who are struggling to keep inflammation levels down because heightened inflammation can mean flares and can mean a lot of problems. My wife had Lupus and we went through the huge autoimmune flare last year that was terrifying and this is part of her protocol to keep her inflammation at bay. The anti-inflammation, the mitochondrial impacts, the skin stuff, I want to look like I'm 27 forever, so it definitely helps with that. But it was just overall I know what it does and then hormones wise the first time I ever saw these marketed, red light devices, was Ben Greenfield posting something naked in front of a bunch of red lights saying he wanted to have more boners. There's definitely something there with hormones, libido, that type of thing as well, from what I understand, and yeah. It's just like a... there's no... it's so easy. I usually just stand there and read a book, or listen to a podcast, or an audio book, or I've even sat in front of it and done my meditation for the day. Now that I know I can kill two birds and put it on a... I put it on a little... we have a stepstool, I could sit in the sauna, put it on the step stool right outside the window, that just made my day. Yeah. [crosstalk]. I didn't mean to take over there, I just wanted to share with our audience why I brought you specifically here to talk about this and why I have this device. For people who want to see how powerful it is, I can... and if you guys want to check it out, I put the sticky note, I think you should all be able to see it on the top of the chat. If you go to their website redtherapy.co.com you can see the devices there, you can use the code RHT, it'll get you \$25 bucks off any purchase and that's super generous of you guys, we appreciate that.

Eric James:

Absolutely.

Michael:

I'm going to turn this puppy on. There I'm now red, if anybody wants to see. That's pretty bright. These are no joke, legit powerful lights. We live in a little community of cottages here in this little fenced in, there's 10 little cottages. When we first moved in there were a lot of rumors about us because a couple times a day our bedroom windows, through the blinds and the curtains would glow this super bright red. Once we started actually talking to the neighbors they were like, "I've got to ask, what the hell is going on in your house with the red lights?" Now everybody wants to get one.

Eric James:

That's awesome.

Michael:

I see a bunch of questions there. This is the 360, Annie, for the 360, for my body, per Ari's recommendation in his book, I do about five minutes per quadrant. Top front, bottom front, top back, bottom back, I do about five minutes at each. They didn't have the 720 when I got this, which is the bigger one. I think you can do just flip one side, one side with that, right?

Eric James:

Yep. You're five minutes front, five minutes back.

Michael:

Yeah, so it would go from 20 to 10. Then they provide... there's an app and a little booklet that came with it that has some more specific recommendations if you're using it for something more specific. Like when I talked

to you, Eric, you'd said if it was skin the ideal is a little bit further away, where if I have an injury I'm trying to treat, or something, you'd want to be closer.

Eric James:

Yeah, exactly. Basically, because the brighter it is, the deeper the penetration. If you're trying to get into your back muscles, or something like that, you're going to want to be six inches away, but that's a little bit too bright for your skin, so it's adding a little bit of stress to your skin. It won't hurt it, it would just make some of the positive effects go away. For a lot of people that's an okay balance, if you do the 36 inches away, or 24 inches away, for your whole body and your skin. Then you go up close on your knee or you back, it's okay if your knee or your back doesn't have 27 year old looking skin, because you'd rather have it feel good to you. That's one of the ways we designed the devices to be incredibly powerful and one of the ways that you adjust the power level and the amount that it covers your body, is just by moving it different distances away. You can also turn on just the red or just the near infrared if you wanted it closer with less power and another kind of thing that you hinted at is that it's very, very bright red, so if you use it at night your neighbor's going to see the light.

Michael:

Oh, they can even see it during the day. It's pretty bright.

Eric James:

One trick you can do, it just depends on if you want to talk to people about red light, it's the perfect excuse to leave it on red, but for my wife and I, if we're watching TV or something like that, and we don't want to turn the whole room bright red if I'm going to shine it on my back, I'll just turn on the NIR switch, then you can't see it at all, you're still getting the treatment, you would just do it for twice as long. That's kind of a little hack so that you don't have to turn the whole room red if you don't want to.

Michael:

Interesting. I'm going to leave this... I've tried to mark some of the questions to help your team out there with the little red dots from what I see, but there's a lot. After I went on my little rant there's way more. I usually man the chat box, so if you see me looking over there I wasn't not paying attention, I'm used to hosting the webinar and answering the questions. I don't usually have the guest's assistant in the chat box who knows more than I do about the thing, so this is actually pretty nice. There's a good one for you, maybe you could answer, the expected lifetime of the device measured in hours.

Eric James:

It's 50,000 hours is what the LEDs are rated for.

Michael:

I'm going to a calculation here.

Eric James:

Yeah, if you use it every single day I think it was 10 or 12 years, or something like that, when I did the calculation. Yeah. For most people it will last a decade, no problem.

Michael:

Yeah, I might have did it wrong but that came out to 150,000 uses for me.

Eric James:

Okay, yeah that sounds right.

Michael:

Okay.

Eric James:

Maybe it's... then divide it by 365 or...

Michael:

No, that's uses, that's days.

Eric James:

[crosstalk]-

Michael:

If I do... Yeah. If I do 20 minutes a day that's a third of an hour, if it's rated for 50,000 hours I get three uses for every hour, so you times the hours by three. That's 150,000 uses for me, or 75,000 uses because my wife. That'll last us more days than we're going to be alive, probably.

Eric James:

There you go. We've never had-

Michael:

Who knows though, maybe that'll extend us to infinity. [crosstalk]-

Eric James:

That's true. You might actually need to replace it because we're creating customers that live a lot longer, I hope that's true [crosstalk].

Michael:

Is there anything contraindicated? You had mentioned that in one of the slides about macular degeneration, but then also there are protective glasses that come if it's going to be close to the face. There's a couple questions about that, ten anything anytime it's contraindicated, like pregnant, any type of cancer, any type of thing that you know about that's don't put red light.

Eric James:

Yeah. There's no studies on it, but yeah, it's basically the main one that the FDA is concerned that we say is just not for pregnant women or nursing women. Then as far as cancer goes, because this helps ATP production, it will help ATP production in any cell, including cancer cells. It's still up in the air whether doing red light while you have a tumor that you know about is a good thing or not, but there's actually evidence starting to show that it's a good thing because it's helping your immune system have more energy to fight something that it already knows is wrong. That overpowers any positive effect it's having on the tumor, but yeah, certainly that would be something to discuss with your doctor if you are dealing with that.

Not something I would suggest just using if you know that you have an active tumor that you're fighting. But one of the studies NASA did was on using red and near infrared light therapy in combination with... oh, what's the word? Now I can't think... with chemotherapy. When you're on chemotherapy and you're already doing something against the cancer cells, the red and the infrared light therapy can help lower the side effects of the chemo therapy dramatically, so there is a lot of work being done in that particular area. Our company focuses more on the health and wellness side of things, but there definitely are people working on stuff in cancer, and in heart disease, and vision, and diabetes and all kinds of things like that. There's definitely research in that area.

Michael:

Cool. It's one of the more... I call it passive things that someone can do. It does tons of stuff, but it requires very... I literally just stand in front of the thing or sit in front of it for a little while and do something else. You don't have to pay attention to it, the light doesn't get upset if you're multitasking, you don't have to tweak, or touch, or pay attention to anything, there's one setting, it's on or it's not on. You can't forget to leave it on because you're... or you can't forget to turn it off because your whole house will glow red. It's just so easy to me.

Eric James:

Something that's kind of became popular now with our user base, kind of invented this but is like naked morning yoga. The idea is when you first wake up just turn on the light and kind of do naked stretching and naked yoga in front of the light as just kind of a good stretching, wake up routine, and a way to get red light therapy on all of the different angles of your body.

Michael:

That'll be the next webinar.

Eric James:

Yeah. Hashtag naked yoga.

Michael:

Naked yoga webinar at Rebel Health Tribe, that'll get us to go viral.

Eric James:

There you go.

Michael:

As long it's not me. Sunlight... I'm just looking through if there was anything. I think this was the-

Eric James:

I have a few more slides.

Michael:

You have a few more slides? All right, cool. Let's do that.

Eric James:

Keep going?

Michael:

Yeah, yeah.

Eric James:

Okay, cool. You kind of hinted at for athletic performance, one of the most famous examples was Justin Gatlin, he had... I forget what it was now.

Michael:

Sprinter, right?

Eric James:

Yeah, he's a sprinter but he had, I think, a knee injury or a calf injury, I can't remember exactly what the injury was, but basically right before the trials, during one... you know, he was running multiple events and in one event he hurt himself. He wasn't even sure if he was going to run in the 200 meter, I think it was, which is his main thing. The Nike coach had actually brought this \$120,000 red light therapy bed with him to Rio, literally shipped it down there and everything, so he actually was able to use that, because he was willing to try anything because otherwise he wasn't going to get to run, then ran his fastest. It was his personal best or his second, and set a record at the trials in that event when he was injured. He's obviously an extremely big fan of red and near infrared light therapy. That's kind of a fun, famous example. Another funny one to me is that Victoria really does have a secret and it's red light therapy. In digging into red light therapy it turns out that Victoria's Secret, for a long time, has had their Angels using red light therapy to give their skin the anti-aging and healthier look. It's one of the things that they do to actually prep before the Victoria's Secret Fashion Show.

Michael:

Red light and Photoshop, but red light first.

Eric James:

Yeah, lots and lots of other things, air brushing and, you know, but... yeah. Then it's used in all of the major league... not every team has these devices, but a lot of them do and it's growing very quickly. They're talking to use about that, some of the teams. I can't say who, but in the NFL, NBA, and NHL there are teams that now the trainers are taking red and near infrared light therapy very seriously for injury recovery, but also for performance enhancement and actually being able to train more often because the recovery time is less in between each workout. The idea is, yeah, if you can practice more than the other team, then you have more experience, then in the heat of the moment you may be able to out perform them without that. Then, of course, being able to heal. If you've got a very important player who's hurt, the faster they can get healed up the better, so they're very interested in that. Yeah. What do the devices look like?

This is my wife and this is our Red Rush 360, that's \$479. This one is ideal for versatility and portability. Actually being able to, like I said, I use this on my couch behind my back and stuff like that. It comes with a door hanging kit and a way to do that, but you can also just sit it on the floor and put your feet on top of it, it's just much more portable. But the Red Rush 720, which is our newest light, which is the really, really big, ultra powerful, this is the most powerful red and near infrared light device that anyone has ever come out with. It's amazing. I even was working with Ari and I gave him one for a while. I said, "I'm afraid that this thing is too powerful." But he gave me the go-ahead and said that it's good and that the power is actually a good and not a bad thing. This

thing is a beast. It's \$779 and it's awesome, it's powerful, it's ideal for maximum power, lower treatment times, and maximum surface area coverage, it's just not as portable as the small one. It's kind of different strokes for different folks.

There are people that love the 720, wouldn't do anything else, then some people the 360 is definitely better because of the versatility. You might be asking, "How do I use it?" There's a ton of different ways, these are examples with the Red Rush 360. You can just set it on a table, you can set it on the back of a chair, you can lay down and use it, there's all kinds of different ways. Also, you get an instruction book, as you mentioned, in the package that covers all this as well. There's an adjustable door hanging kit. That is how you actually can adjust it so that it's at the top quadrant of your body or the lower quadrant as you can just raise this thing up and down. Then how long does it take? We talked about that. Five minutes for a spot treatment, full body 20 minutes for the Red Rush 360, 10 minutes for the Red Rush 720. This is an important point though, you can use this as a one time thing if you threw out your back or you had a sore muscle, for example. Or you can make it a part of your daily routine.

I like to think about it like eating healthy. If you eat healthy for one day you will actually feel a little bit better, but if you eat healthy for a year, your whole world changes. The same thing is true with light. The full body treatment is definitely a recommendation for good systemic anti-inflammation, anti-fatigue, anti-aging preventative. It's easy to add into a routine like you already do, like you mentioned, getting it when you get out of the shower or when you get done exercising. Yeah, after you do this, say if you do this in the morning, it increases your ATP production in trillions of cells in your body giving you the energy you need as well as preventing inflammation before you head out into your day. It's kind of like adding this armor, as I like to think about it, like I'm doing this thing and then I'm going to go out into the world and the world's going to throw whatever it wants at me and I've got this kind of extra energy to be able to handle it. Something we haven't talked about but that's really important is less is more when it comes to red light.

Many people get super excited about this and think that if some red and near infrared light is good then a lot more would be even better, but this is definitely not the case. If you do too much red light therapy the positive benefits actually go away. It hasn't ever been shown to be harmful, but it's just that the positive effects go away. If you stood in front of this thing for an hour or two, it would absolutely negate any of the positive effects. That's kind of nice because it keeps the treatment times short. I mean, it's kind of amazing that you could just do five minutes on the front and five minutes on the back, then that's the maximum amount you need to do for your whole body, but it's actually true. Doing more is actually just counter productive.

We've tried to make it as easy as possible to do right. One way we've done that is by having a patent pending app that's calibrated and shows you the joules per centimeter squared for your exact light and all of that. We're coming up with an update for that app soon as well, but you just basically select what it is that you're treating, whether you want an athletic type of treatment, or your skin, or a deep tissue, something like that. It makes it a lot easier so you don't have to remember, how far away was I supposed to stand? How long was I supposed to do that? The app helps make it really simple.

Michael:

That's cool. I'm sure that was a lot of work to put together. I'm on the back end of designing an app a little bit right now and it's like there are so many moving pieces of it that you don't think of.

Eric James:

Oh, yeah. It seems so simple when you have it in front of you, but then [crosstalk]-

Michael:

Just make it do this, well you're obviously not a programmer.

Eric James:

Totally.

Michael:

Will it harm pets? My pets actually seem strangely drawn to it.

Eric James:

Yeah, pets are definitely drawn to it.

Michael:

The cat definitely comes in the room almost any time I turn it on and the dogs definitely don't run away. Yeah, I don't think there's harm. Have you ever heard... oh, go ahead, sorry.

Eric James:

Oh, that's okay. [inaudible] jumping in, so I was just saying how do you get one if you're interested in one of ours? Like you said, there are other companies out there but after you do your research if you like ours we would definitely love to have you as a customer. We're offering \$25 off the Red Rush 360 and actually \$45 off the Red Rush 720 for the Rebel Health Tribe, so you just use the code RHT at checkout and it's worth noting that we have free shipping, a 60 day free trial, and free return shipping. You can take the time to see if it indeed gets you the results you're after, we also offer a two year warranty on all of our products so you can be confident in your purchase. We want to make it as no brainer as possible to try this out and see what it is we're talking about, and really, if you email us and say, "That didn't do anything for me. I want to send it back." We'll send you a prepaid label and take that back. Yeah, we absolutely back our products and the results that you can get.

Michael:

That's awesome. I bet you don't get a lot of them shipped back.

Eric James:

About one percent is our current rate.

Michael:

One percent?

Eric James:

Yeah, we're pretty happy with that.

Michael:

Wow, that's pretty solid. Thank you for the offer, that's awesome. That's really generous of you guys to hook our people up like that. We always appreciate that. I try to... I try to keep in mind as much as I possibly can that a lot of people who are trying to do a lot of stuff for their health, they jump into this, "I want to be health conscience now." And they find all these expenses, and it's this, and it's this, and it's this, and it's this. The main

reason I, like I had mentioned earlier, is you guys are the best value on the market that I've seen. There are some companies that I think have to charge a little bit extra to pay their inflated marketing budget, because I see their ads on all my social media, all the time, every day. I've even sent them an Instagram message and said, "Yo man, you can take me off your targeting because I know you pay for this because I'm not going to buy one." But it's funny.

Eric James:

Yeah.

Michael:

Yeah because that stuff's expensive. I do marketing online. I know how expensive it is to buy those ads, but that's my theory as to why their devices cost so much money is because they've spent a lot on that. Did you... let me see... let's see here.

Eric James:

I think that's a good point too, is obviously we would love to have you as a customer if you're interested in this, but regardless if you even decide to get a red light therapy device, I hope that this has offered a deeper understanding of light as a nutrient and the different ways that it can affect your health, including the other parts of the spectrum that we talked about, just even getting enough sunlight for people is huge, is a huge first step. Then if you decide that a red light therapy device is right for you and you want to amp it up it's a way to get those nutrients without having to have the risk of overdoing the UV. You still need sunlight, but I actually do think that these devices are even better than getting just sunlight because you're getting a maximum dose of red and near infrared without getting too much UV, which is otherwise very hard for people to do.

Michael:

Do you have a preferred time a day? Is it better for you to do this in the morning, or the afternoon, or the evening? Does it impact... you know what I mean? Because I think it's the blue light that impacts... the blue light needs to be in the morning and during the day.

Eric James:

Yeah. I prefer to do it in the morning and definitely get blue light in there also, so the red light won't stimulate the pineal gland. Bright light does help though, like a very bright light so it wakes you up pretty good. But I like to use it in the morning to have that energy boost for the whole day. Personally I can't use it late at night or I just can't go to sleep because it's kind of like drinking a cup of coffee for me so I can't sleep just because of the energy boost but a lot of people actually use it at night and have it help... because it helps them sleep because it improves the hormone production of the sleep hormone cocktail. A couple hours before bed there's a lot of people that will use it specifically just for that to improve their sleep. That's something you kind of just have to test yourself to figure out when the best time of day is, it also kind of depends on what you're trying to do. If you're trying to recover from a workout, it would make sense to do it after the workout. Yeah, if you're trying to sleep it makes sense to do a couple hours before bed, but not too close to bed. For me, it's like my cup of coffee, so it's in the morning.

Michael:

Awesome. Can someone have a link or access to the scientific studies. If you ask which... did you say you had a spreadsheet?

Eric James:

Yeah, absolutely. [inaudible], if you're listening, you can post that in the chat.

Michael:

She's in there.

Eric James:

Or if you email team@redtherapy.co and just say, "Hey, send me that spreadsheet." Then we'll reply back with that spreadsheet.

Michael:

Cool. Yeah, and if you downloaded... we've been offering for a couple weeks Ari's ebook for them. There's more in there than one person could possibly read. If you do a quick [inaudible] search, or search online, I mean, I was pretty blown away with how many studies there actually are on red light and near infrared. I've seen estimates anywhere between 3 and 7,000 thousands studies just on red light and near infrared. Then it gets in the tens of thousands if you include the lasers.

Eric James:

Yeah, it's pretty dramatic.

Michael:

Yeah, Dr. Gair that works with the lasers, he's got a book like, I don't know, this big of just low light laser things going back to, like you said, the '60s. I've just been blown away with how many studies there actually are on this stuff. And, like you said, in the states it's still kind of looked at as this alternative, or fringe, or weird, or something and it's just... it's not. There's more studies, more definitive studies on red light than there are on most drugs or supplements.

Eric James:

Absolutely, that's true. [crosstalk]-

Michael:

Most drugs, if people knew the efficacy of drug trials, like what the drug... it has to barely beat a placebo in order to be determined effective and safe. If people saw the actual... man, when I started to learn how to... I went to grad school and I have a master's in exercise physiology, so we had to learn how to read studies and we had to read some drug studies and some things like that. It's incredible what low bar is set for being able to make claims when it comes to that. Kim, I don't think you would need to shave your pets, I think it goes through the hair.

Eric James:

Hair does block some of the light, and it depends on the darkness of the hair. If you have really dark hair, or your pets have dark hair and they had an injury or whatever, what you can do is just spread the hair, just kind of parting your hair. You would just part and then wait a minute, then part in a new area, and part in a new area. That's what veterinarians that use these kind of devices. We don't market to that field, but there are

other companies that do and that's kind of how they do that. It's also very big for horses, and horse have short enough hair generally that it can go right through the hair.

Michael:

Cool. Yeah, I met someone here in yoga, I was talking about it after a yoga class I mentioned red light because somebody was saying they have a chronic shoulder and I said, "I used to have that too and here's what I did." Then this other woman chimed in and said, "Yeah, I use that on my horses." She has a light device she brings out into the barn and shines on the horses. She said it helps their coat a lot and they seem to... she said they seem to enjoy it, which I don't know how they measure that, but she said it helps their coat a lot and it helps them with their... they can tell they recover better from the exercise. Yes, Tom, this is recorded. We'll be sending it out to anybody who registered. We'll be posting it on the website and we'll have a link there to their site, maybe we could post some studies there. We'll have the code there and we'll probably thrown Ari's book on there too. Honestly, it's free and it's any information you could possibly want to know about red light therapy in a really well written book. I would recommend, if you still have a lot more you want to learn, check that out. This was a great overview, Eric, thank you so much.

Eric James:

You got it.

Michael:

We talked on the phone earlier this week and there's... he chose, I don't know, three, four, maybe five studies and examples to talk about. It could have been 30,000 more of them and nine hours long. Ari went that crazy in his book though, so you can find that. Yeah, this is just something that we're really excited. It's been part of my wife's program to keep her autoimmune condition at bay, it's part of our everyday routine with that. It's something simple to add that has huge, wide ranging benefits. I just... I think it will be something that ends up in everybody's house. Kudos to you guys for making one that's so powerful, and affordable, and accessible to people because this is a really powerful technology and count your blessing for having a mechanical engineer professor dad when you decided to make a red light device, I'm sure that was helpful.

Eric James:

Absolutely. Yeah, it definitely was.

Michael:

Did he know about it, when you reached out to him and said, "Hey, could you make this?" Or, "Can you design this?" Or anything, did he know about the effects of it at all?

Eric James:

No, not at all. He's only recently decided to finally try it. Different members of my family have different levels of wanting to try it or not. He's seen a huge difference in his skin, his skin is the number one thing he notices as well. But no, he had no idea about what was going on with this. I mean, it seems sort of like how could light have that big of an impact, but I think intuitively, when you really zoom out, we can feel like we spend tens of thousands of dollars to go on vacation to lay in the sun. We want to be around a campfire. There's these certain things that we're drawn to light and then we're in all this artificial light all day. It sort of makes sense when you look at it through that lens, but initially, even me, when my step-mom was first trying it I thought that it was

just placebo, but I didn't want to ruin it for her. I totally understand if people are skeptical because I was myself.

Michael:

Yeah, I was too. It took me probably close to two years after I first heard about red light to really take it seriously. I apologize folks, I'm usually way more ahead of the curve than this. We kind of pride ourselves here about finding things and bringing it to our audience before they hear about it other places and this one we maybe failed, but at least we made it and we're here now and my skepticism, it's just different. It's just something different, light, we think, oh plants use light but our cells and our functions aren't nearly as different from theirs as we think they are. It's cool stuff. Yeah, we do go on vacation to out in the sun and then we feel awesome. If I had a buck for every time posted in our Facebook group, or a client or something said, "I went on vacation and my symptoms all went away, and I felt so much better. Then I came home and I was sick again." I was like, "Well, what did you go?" And they're like we did this, and this, and this, and this, and this and the common denominator among wherever they went is they spent most of the day outside.

Eric James:

Yeah, totally.

Michael:

We're bringing a little bit of the outside inside with a very fun, confuse your neighbors kind of light and one of them is out there right now so I won't have to turn it back on. They all know what it is now, so when they see it they laugh, but cool. Thank you so much, Eric.

Eric James:

Thank you for having me on here and thank you everyone listening for your time as well. I really appreciate that and know that time is valuable, so I hope this is really valuable for you as well.

Michael:

I learned a ton, I'm sure they did. Somebody was asking can you use only one kind of light and not the other? Right now my near infrared is on and my red light is off, so you can do them isolated.

Eric James:

Yeah, you can do them together or isolated.

Michael:

Yeah, yeah, yeah. Cool. All right, thanks a lot, man. Again, we'll send you guys the recording, website's redtherapy.co, use the code RHT your discount's there. The free shipping on this is awesome too, this is a heavy thing. This probably is not super cheap to ship, this thing probably, the little one I would guess weighs about, I don't know, 10 pounds, eight pounds.

Eric James:

Yep. It's like 12.

Michael:

12 pounds? Yeah, it's going to save you a bunch of money. Thanks again. Let's do some more fun stuff later and I hope everybody enjoyed this, and I did. We'll hit you up with the recording soon. Thanks again, Eric.

Eric James:

You got it. See you.