



#641 Biohacking Blue and Red Light for Sleep, Hormones, and Recovery | Andy & Katie Mant

Dr. Wendy Myers

Hello, welcome to the Myers Detox Podcast. I'm Dr. Wendy Myers, and on this show, we talk about everything related to heavy metal and chemical toxicity, what toxins are doing to your health, and how they're destroying your health and your waistline, making you gain weight. We also talk about more advanced topics than you'll hear on other shows. I love talking about bioenergetics, biohacking topics, and today we're gonna be talking about biohacking light, the different types of light, and how they affect your body and why it's so important in managing your circadian rhythm, which then dictates your hormones, sleep quality, and whether you're tired or stressed out.

We're going to have Andy and Katie Mant on the show. They're the founders of Bon Charge, which is a company that has blue light-blocking glasses and red light devices. We're going to talk about the whole spectrum of light, including near infrared, far infrared, red light, and blue light. It's just really a great deep dive into all the science and all the benefits of these different types of lights, and when you need them and when you don't. So it's a really, really good show today. Our guests are Andy and Katie Mant, a husband and wife team that founded Bon Charge, which is a company dedicated to creating science-backed wellness products that help to optimize sleep, energy, and recovery.

Andy's journey started with his own health struggles with weight gain, chronic fatigue, and poor sleep, until he discovered the impact of light on the body's natural

rhythm. Now he's the leading voice in the biohacking space on this topic, helping people reclaim their health through light-based solutions. You can learn more about Andy and Katie's work at boncharge.com. Andy and Katie, thank you so much for coming on the show.

Katie Kant

Thank you so much for having us.

Dr. Wendy Myers

Why don't you tell me a little bit about yourselves and how you got into the health space?

Katie Kant

It was actually in the journey leading up to our wedding. We were looking to get in shape and look our best, like any bride and groom are for their wedding day. We were looking at diets, nutrition, exercise, and that only took us so far, and we ended up going down the rabbit hole of learning about sleep and how sleep can impact how you show up every day, how you look, and how you feel. We looked at ways to optimize our sleep. And this is going back about eight years ago. So it was a lot of talk about artificial blue light after dark and the impact that has on your sleep, which led Andy to go online and try and find a pair of blue light-blocking glasses that he could try to see if they actually were, there's a lot of signs coming out at the time to say, if you wear blue light blocking glasses two to three hours before bed, it can block the melatonin disrupting artificial blue lights.

But the challenge we had was that we couldn't find any pairs of glasses on the market that were fashionable enough to want to wear if you're out at a restaurant or at the gym. They were like falling on safety goggles, very anesthetic, but also they didn't match what the signs were saying that needed to be blocked in order to have any actual meaningful impact. So long story short, we decided to try and develop a tint ourselves in our garage to match what the signs were saying needed to be matched, and managed to succeed with that and sent it to a few influencers. They

were tracking it at the time with their early auras and whoops at the time, and saw that their sleep was improving more than the other pairs that they were wearing.

They encouraged us to start a brand. And so we did, and we started as Blue Blocks. The journey has grown over the years. About three and a half, four years ago, we rebranded to Bon Charge to cover the breadth of products that we've now moved into and now offer.

Dr. Wendy Myers

I know I had blue-black glasses many, many years ago. Andy, I've known you for over a decade now. It's great to see how far you've come and expanded to red light devices and other things that are so helpful for people. Let's talk about the problem with blue light. I don't think people realize how bad it is for you. There's so much research about how our phones emit so much blue light and are destroying people's sleep. There's an epidemic of sleep issues among other problems. So what is it doing to our bodies?

Andy Kant

Well, it all goes back to a circadian rhythm and body clocks that are in our bodies. We evolved with these body clocks inside our brain, inside our skin, inside every cell in our body. The reason we've got those body clocks is that our internal world, like our hormones, our neurotransmitter process pathways, they don't know what's going on in the outside world. So they need some sort of master clock system in the body that then translates what's going on outside so they know what hormones to release when and where. Think, for instance, if you get a shock and you get that adrenaline rush, that's a hormonal response to the outside world.

The outside world is talking to the cells in the body to signal hormones and neurotransmitters to make us be optimal in a given situation. Now with these circadian clocks, they are triggered by multiple different factors like temperature, climate, seasonality, but the main driver is light. On a day-to-day basis, our hormones and neurotransmitters are governed by the signals of natural light to the body from an ancestral viewpoint. So before any artificial lighting, we would get

up in the morning, the sun would be rising, that would send specific signals to the central clock system, which would tell our body to release dopamine, release serotonin, release cortisol, which keeps us nice and alert during the day to be able to go and hunt and gather and just do what humans did.

As the earth moves around the sun, we start to see different changes of frequencies of light and that again tells the body what's going on. It's midday. Now we need to do X, Y, and Z. It then starts to set in the evening. Our body sees that and it tells us to lower cortisol and increase melatonin. So that's how we work from I guess a daily cyclical standpoint.

But what we've done is we've decided to try and cheat Mother Nature. And as we know, when we start trying to cheat Mother Nature, it ends up with a whole host of issues for us as humans. The way we've done that is we've decided to create something called artificial light. Now this is light that isn't found naturally in the environment. So think of light that's given out by your house lights, your smartphone, street lights, TVs, fridge lights, things like that. They have a very distinct frequency and spectrum of light, and our body clock can't tell the difference between that and natural light. It's very similar to the type of light given off by the midday sun.

So right in the middle of the day when we need to be the most alert and active, we've got these artificial suns in our environment from our smartphones, TVs and such, telling our body clock that it's always solar noon. So we're not going through this cycle of hormones, this cycle of neurotransmitters. And the biggest problem with it is that we now have no periods of darkness in our life. We did ancestrally. Now when the sunset, we'd have our campfire and that red light doesn't impact melatonin. But because we've got artificial blue lights, smartphones, TVs, et cetera in the evening, our body still thinks it's so noon all the time, so our cortisol levels are always high, and that's really bad.

Chronic cortisol can lead to anxiety, depression, and chronic stress. It can reverse the cycle. We've seen that in studies where you're meant to have low cortisol evenings and higher in the morning, and it goes up and undulates throughout the day. But we've seen it where you get low cortisol in the morning and high in the

evening, and that's personified by people feeling groggy. They find it hard to get up in the morning. They feel tired when they should be the most alert. And then they have the opposite in the evening where they're perhaps sluggish during the day. They get their 3:00 PM slump in the office, then they get home and come nine o'clock, they're wired, they've had caffeine. And that's because their cortisol cycles are messed up from exposure to artificial blue light at the wrong time of day.

Ads 08:47

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and three grams of leucine per serving is key for supporting muscle protein synthesis as you get older. Protein also supports healthy detoxes. Your body uses amino acids to help bind and eliminate toxins. And yes, it tastes amazing. My daughter loves the taste as well.

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Dr. Wendy Myers

I think people don't realize that. When I was first starting to do functional medicine, every single person that would do the saliva cortisol tests, everyone was outta whack. They just don't make that association to their circadian rhythm and their habits and being exposed to blue light and lack of sunlight also.

Katie Kant

We were just not living with nature anymore, are we? I think too many people fail to look at lack of contact with nature as a reason for why they're feeling the way that they feel or the reason that they have the medical issues that they have. It's easy to look at diet or exercise. Those are things that we're told about all the time, but not enough research, not enough studies, not enough education is being put out there about light and that impact, like you just said about being out in natural light. It's fundamental for us. You've probably seen the memes. We're a more complicated houseplant. Food and water only takes us so far, but we need the light as well, and that's true for humans.

Andy Kant

There's a few different understandings of light. You go through this evolution, you become brainwashed by the media and doctors and FDA and brands and

companies and organizations that where they tell you the sun's bad, stay out of the sun. It's gonna cause cancer. Then you get to the awakening stage where you're like, sunlight's great. Sunlight is good if you're outside exposing your skin to ultraviolet radiation when it's low, and maybe in the mornings, in the evenings to help synthesize vitamin D from cholesterol.

Then you get to that stage. Then you start to take more of this rabbit hole thing. You'll know about it, Wendy, start looking at one thing and then it leads onto the next. Then you start looking at how sunlight actually impacts your sleep. So people just think then, oh, it's great for vitamin D, which it is, but then what they don't realize is if you miss that sunrise in the morning, that important circadian trigger is for serotonin. What a lot of people don't know and fully understand yet is that serotonin is a fundamental neurotransmitter in the formation of melatonin, which is our sleep hormone later on in the evening.

Studies have shown that people that are outside more in the mornings are actually producing more melatonin in the absence of blue and green lights in the physiological darkness state created by blue wear and blue light blocking glasses in the evening. So it's all this cascade effect. There's so many different pathways that create different downstream effects by embracing sunlight. Now, I'm not advocating, 30, 36 degrees centigrade, which you know is probably high nineties Fahrenheit here in California today. Uvs are gonna be incredibly high during the middle of the day. What I'm not advocating is going out in the middle of the day and basking in the sun.

I'm saying go out in the mornings from seven till 11:00 AM perfect time, and then four o'clock in the afternoon through to seven. Another beautiful time to be out in the day. You're gonna build up more melanin that's gonna protect you more from the high UV periods during the day. But I always like to look at animals, right? What do they do as well? You're not gonna see a lion hunting in the middle of the day, you're just not. They're gonna be laying under the tree in the shade, but in the lower UV periods, in the cooler periods of the day, they're gonna be more active, which will be the beginning and the evening.

So yeah, sunlight is just this magical thing that does so much more than just warms us and creates vitamin D. It's pivotal for hormonal health, neurotransmitter regulation, and sleep.

Dr. Wendy Myers

And that's so key. You're going out in the morning, getting morning sunlight, you're gonna make serotonin. And that's what melatonin is made of. It's made of any excess serotonin you have that you're gonna make more melatonin as a result of that. So low serotonin, low melatonin production. But blue light is also good as well. We get blue light high noon from the sun. There are times when we need it. It's not all bad. Can you expand on that?

Katie Kant

It's funny, we've actually been here in LA for about 10 days now, just over a week, and the amount of people we've seen walking around wearing blue light blocking glasses during the day outside because again, that mixed messaging has been put out there, that blue light is bad, which it isn't. It is found naturally in the sun. It's present during the day, and that's the cue that our body needs to tell us that it is daytime and then it allows us to be awake and alert and produce the relevant hormones needed to be awake and alert during the day.

So if you're blocking it during the day, you're gonna be disrupting your body clock equally as much as if you're not blocking it after dark. It has the same effects on your body clock as disrupting it. But the other thing is you don't want to block natural blue lights. It's there in nature for a reason. It's the artificial light after dark that's causing the issue, not the sunlight during the day. So a lot of people are misreading the education that's been put out there. That's that the blanket rule of blue light is bad, it isn't. You need it during the day in order to regulate your hormones, regulate your body clock, and to be awake and alert. Without it, you'd be very groggy. You'd be very low, very flat, lacking energy, possibly leaning into depression and things like that 'cause you haven't got enough pep going on. So the key is to take in natural light, but block the artificial blue light after dark.

Dr. Wendy Myers

A lot of people block the natural light with sunglasses also, which you don't wanna do. You need the light in your eyeballs.

Katie Kant

It's true. And that's a really controversial topic because yes, you're right. You don't want to be blocking natural light. However, realistically, we've now built a man-made world where we have a lot of reflective surfaces that aren't present naturally in nature. We think of ancestrally, how we would've lived. It would've been sand and earth and grass and dust. Whereas now we have skyscrapers with metal and glass and they're highly reflective and that is causing a lot of issues, not just for the skin but for the eyes as well. So there are sometimes instances where you may want to consider being careful of direct light exposure if you're in those environments. 'cause that can cause some problems as well.

We always advocate for trying to not be in those environments. But if you are, then look at more holistic glasses that are on the market. There are some that don't block all of the frequencies of light. What most sunglasses on the market do is block the full spectrum, the blue and the reds and the restorative frequencies. You just want to reduce the glare more than blocking those lights and that ultimately can disrupt your body clock. In fact, you've read some studies on how, if you are wearing sunglasses, how it impacts the skin and sunburn. How that can trigger issues

Andy Kant

Yeah, exactly. It's all context as well with things like in the mornings and the evenings. No, you should never be wearing sunglasses. Absolutely not. Watching that sunrise, you don't have to look directly at the sun when it's rising. Maybe just a little bit to the right is fine, because you want all that information the sun's giving you, that's what we've evolved under from our circadian rhythm. So we need that. I guess looking at what Dr. Jack Cruz is saying a little bit as well with UV, the highest concentration of DHA in our body is found in our eyes, and that is vital for

reacting with ultraviolet light to actually create more negative ions in the body, which will reduce inflammation.

So it's almost like a power cell. The DHA cell in the eyes is fundamental for not just anti-inflammatory impacts, but also regulating the mitochondria as well, and ATP production. So there's been some interesting work being done on that and some discussions happening. From Katie's point, sunglasses during the day is, again, a difficult one. If you're skiing, you probably wanna wear them. If you're in high reflected areas, probably want to, but there was interesting studies that have shown that people that wear sunglasses are more susceptible to sunburn.

That doesn't surprise me from what I read in the literature, that our bodies can't detect UV light. It cannot, it's an invisible frequency of light. It doesn't know if it's present in the environment. But what it does know is that when blue light is present, UV is typically gonna be present, which makes sense when the sky's blue and when the sun is shining, UV is gonna be available in the environment. So what that does is that it increases cortisol levels, which is very good because cortisol is an antagonist to any kind of ultraviolet light damage that could be caused by the sun. So when we're wearing sunglasses and blocking frequencies of blue light, we're not producing as much cortisol during the day. Therefore, we're not as protected against ultraviolet light.

Now the other factor leading into staying on the subject of sunburn and other harmful things that the sun can do to your skin that we all know of is, is it a problem of sunlight or is it a problem of lack of darkness? Cells in our body repair and restore in the absence of artificial blue light or any blue light and green light, they need darkness. There was an in vitro study done where they shine blue light onto skin cells and kept other cells in the dark and the blue light, they shone on the cells, put the cells in this active mode, whereas when they didn't shine the blue light on the cells, they went into repair and restore mode.

So maybe we're spending all day at the beach, maybe we've got a bit pink and sunburnt. We've been out in the sun all day, getting a lot of UV exposure. Then ancestrally, we wouldn't have seen blue and green light. We would've sat by the campfire eaten, just chatted, things like that. The cells in our body would've

repaired any damage caused by that UV light. But what we're doing now is we're coming home after the beach sunburnt, watching TV, not allowing our skin to heal and restore. So is that the problem? That's the question that I always ask myself,

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Are you taking collagen supplements? Well, check this out. Our friends at Organifi have sourced the best collagen on the planet, and you can get it with 20% off savings today, too. So, what is collagen? It's the most abundant protein in our body. It's everywhere. It's in your muscles, joints, hair, skin, fingernails, everywhere. It's one of the fundamental building blocks of life. Your body uses collagen constantly to keep itself refreshed and repaired. But as you get older, especially as women who are going into menopause, you can lose 30% of your collagen within the first five years of menopause, and that starts in perimenopause as well. Your body just stops making as much of it, and you start losing it, especially as your estrogen levels come down. That's why consuming collagen is such a great idea every single day. It gives your body a fresh supply to keep working at its best.

It's not only good for your hair, skin, and nails, but it helps to support your gut and metabolic health, immune system, cardiovascular strength, and all of your muscles and moving parts too. Collagen is nothing new. It's one of the oldest supplements out there. Collagen supplements have been around for quite a while now. But what makes Organifi so special is it's all about the quality. The non-organic collagen scare 16 me. They're really problematic because they can be full of glyphosate, pesticides and other chemicals that you do not want to be taking on a daily basis. Not all collagens are the same. It can come from many different sources and the source can drastically impact its potency and effectiveness as well.

Some manufacturers just go with the cheapest stuff that they can find and then add fillers and artificial flavors and they still charge you a lot of money for that. Organifi always goes the extra mile to ensure their quality is the best. They blend five collagen types from four different sources, and they taste and test until it's perfect. And then they go even further to test for things like glyphosate residue and other sneaky toxins that can get into the mix. After passing through all of these goalposts, it finally gets the Organifi seal of approval so you can rest assured it's

the highest quality and non-toxic. I love that this company is a company that I can trust that their products will be safe and effective exactly as they say they will be.

In the supplement world these days, that kind of honesty and transparency is getting harder to come by. So, if you've never tried collagen, now is a great time to start. And if you're already taking it, now is a great time to switch to a better brand. Upgrade what you're doing right now so you and your entire body is gonna love Organifi Collagen. It is something that I take on a daily basis. It's been a part of my supplement routine for the past five years, since I went into menopause, and so I can't recommend it highly enough. Now let's talk about saving you some cash as well. Here's what you do. Go to organifi.com/myersdetox and put in coupon code Myers detox to get 20% off. You'll save an extra 20% off by putting in my special coupon code Myers detox. So, like I said, collagen's one of those things that I take every single day. It's one of the most important parts of my anti-aging protocol, the things I'm doing to fight off the clock. So for me, taking clean collagen is really important. It's hard to find, so I highly, highly recommend Organifi collagen.

Dr. Wendy Myers

Yeah, that's such a good point. I think people just don't even think about wearing their sunglasses during the day. They think they gotta protect their eyes. They gotta protect their eyesight. How do you suggest mitigating this blue light that we're exposed to in the evening?

Katie Kant

Well, there's a couple of things you can do. One is to wear blue light blocking glasses. That's probably the easiest thing to do that will interrupt the signal that your eyes are receiving as to what the light is. So you can be in a blue light environment but not trigger the pathways through your eyes that tell your body that it's daytime and to remain alert, it'll actually do the reverse. It'll signal to your body that it's actually nighttime and to reduce cortisol and increase melatonin. So that's a really simple hack, and you just literally wear them two to three hours before bed, but you have to wear them consistently.

Don't take them on and off. They're on and they're worn right the way through to bed. Turn your lights off and then take them off 'cause any sort of interruption of blue light coming through will impact the cycle that you're trying to set. But the other thing is, it's even simpler again, is to change your lighting in the first place. That's what we were looking at on our journey with Bon Charge. We started the company with blue light blocking glasses 'cause we wanted to block the bad frequencies of light after dark. But we decided to take it a step further and go, well, how do you mitigate the actual light being bad in the first place and make the light good.

That's where we went into circadian friendly lighting because on our journey and loss of research that we were doing, we learned that it wasn't just the eyes that could receive the signal. Your skin can receive the signal of light as well, and that can determine whether you produce cortisol or melatonin. So even if you are wearing blue light blocking glasses, ideally you want to either cover your skin. Or an easier hack is to change your light bulbs in your living room, in your bedroom to blue free light bulbs. And that's a simple thing 'cause you literally unscrew a light bulb, screw another one in and you're done.

Dr. Wendy Myers

I have your light bulbs here. I have the V charge. The hearth light bulbs are so key. I put these all in my home. It's not super bright. I don't have these super bright LED lights, but I think people don't realize that the LED lights are flashing really, really quickly. It's not perceptible, but it's very, very stressful on your body. And when you put these on, it's kind of mimicking a fire, like you're sitting around the fire, like the cavemen. It's just a very natural light. It's not triggering cortisol, that bright blue light emitted by every light bulb that you buy at the store, which are almost exclusively LEDs now.

You're not getting that cortisol rush and you don't even think about it. You just walk in the bathroom, turn the light on in the middle of the night, say if you have to go to the bathroom, you're telling your body, Hey, time to make cortisol. And people wonder why they can't go back to sleep. These light bulbs are fantastic to

mitigate all those problems with poor sleep and producing too much cortisol at the wrong times.

Katie Kant

Both of those things require a purchase, but the best thing you can do is get out in nature, how we started this conversation a minute ago. Get out in the morning when you wake up, the first thing you do, don't switch on the lights. Don't look at your phone, don't turn on the TV, get outside and take in natural light. That's the best simple free hack that you can do. A question we get asked a lot is, what happens if I wake up before the sun rises?

Well, you just mimic your evening routine in the morning. So if you do wake up before the sun rises, make sure you are wearing your blue light-blocking glasses. Make sure you are using blue free lighting until the sun comes up, and then take your glasses off and take in the natural light and that simple thing can then align your body clock. Make sure you do not have peaks in cortisol at the wrong times of day and suppress melatonin when you want it to be rising for sleep. So that's a free simple fact that anyone can do.

Dr. Wendy Myers

I love your glasses here though. I've been wearing these at night and these are prescriptions. So you also make them in prescription 'cause that was for so long preventing me from using any red light glasses because I wear regular glasses. You can see my eyes. I look like an Amazon fly right now 'cause my eyes are huge 'cause of my prescription, but I wouldn't wear blue light blocking glasses even though I wanted them, 'cause I couldn't find any that fit over my regular glasses. A lot of companies don't do the prescriptions, but Bon Charge does.

Andy Kant

It is super important because a lot of people have had years and years of blue light exposure without any protection. So they're gonna have potentially the start of macular degeneration or a script because of those things. So we do the prescription.

Our glasses are also HSA/FSA eligible as well, so you can use your pre-tax dollars on them, which makes 'em even more cheaper and then they last forever. They really do. I think another pertinent point as well is to discuss peripheral light. A lot of people talk about that. So a lot of people say, oh, well what's the point of blue light blocking glasses? Because unless they're fully wrapped around like the goggles, you've got light coming in from the side. But actually a lot of research shows it's all about light angle.

Light passing through the eyes has to pass through to reach the back of the structure directly on. So when you've got your ipRGCs that are located in the eye that detect the blue light, if it's coming in from the side, they actually don't activate them. They have to come in from a straight angle. So wraparound isn't actually necessary, but we do have wraparound glasses for those that are still skeptical of the research on that as well. So, we've actually had that checked out by a couple of doctors as well that specialize on the eye side. They don't know much about the dangers of blue light, but they know about light angle and IPRGC receptors and how they're activated as well.

So that's pretty cool. But you mentioned earlier as well about. The light in the evening. You get up to go to the bathroom, light comes on and it is really bad. We have night lights as well that you can use that give out red lights. But another thing I was gonna ask you, Wendy, I was really keen to get your thoughts on it as well. We're seeing a big trend at the moment of dark showering, getting into that parasympathetic state by not actually showering with the lights on. Have you come across that yourself in your line of work?

Dr. Wendy Myers

I hadn't really thought about that, but it makes perfect sense. Everywhere in your home where you're gonna be turning the lights on in the evening to just replace it with a red bulb so that you're just mitigating that whole issue. 'cause a lot of people take showers before they go to bed. So, it only makes sense to do that biohacking component. Try to mimic nature as much as possible. You're gonna see the results from that in your health.

Andy Kant

So true.

Dr. Wendy Myers

We've been talking about blue light and mitigating that, but let's talk about red light. We can do some biohacking here or we get red light, infra red from the sun, but for many different health issues, we can increase the amount of red light that we're exposed to. Can you talk about the different types of red light?

Katie Kant

This is probably another misconception that's out there because everyone tends to group red light therapy just under the term infrared, whereas there's different frequencies of red light that do very different things. They're all found again naturally in the sun, but again, we're not living in nature anymore. We're disconnected. We have jobs, places we need to be. So a lot of red light therapy is now being put into devices that you can use at home or at the gym in order to harness the benefits that you would get in nature in a more convenient way when you're indoors.

So the different frequencies of red light therapy that are the most prominent that most people don't understand, there's red near infrared and far infrared. Red light is the visible color that you see. It's probably the one most people associate with red light therapy 'cause it literally lights up red and you can see it. But that frequency is very much targeting more of a skin aesthetic appearance. It penetrates through to the dermis layer. So it's gonna be working on things like fine lines, wrinkles, tone, texture, scars, redness, imperfection, anything like that. So that is more of a beauty element to it, as well as it being free of blue light.

So it does have a calming, nurturing sort of glow to it. A lot of people use it for their nervous system as well because it is quite relaxing. But the red visible color you see is very much more targeting skin and appearance. Then you have near infrared that doesn't have a color. It penetrates deeper through to muscles and

joints, and that's more of your renewal, restorative, repair frequency. It is used in panels and other devices that are more for post workouts, recovery, potentially injuries, anything to do with inflammation, it penetrates a lot deeper. And then you've got far infrared, which is probably the one most people do in their day-to-day life because it's in a sauna. Far infrared is heat.

It's not the color of the skin. It's not deep penetrating near infrared. It's a heat. It directly warms the body so that your core body temperature rises. You then sweat and obviously release any impurities and a detox pathway. So those are the three different frequencies, and knowing what you are wanting to achieve from your wellness journey determines which one you pick. I think a lot of people just hear the word infrared and assume they all do the same thing. That infrared is one blanket terminology. When there's two different infrareds, far and near and then you have red for the skin.

A lot of panels can incorporate two of them, red and near infrared. That's quite common. That's what we do a lot of so you can target skin and recovery together. You can even have some devices that target all three where they incorporate the sauna elements with the red and near infrared. Again, that's in our dome product that we have, but understanding what they do is key, and I think it is missed a lot at the moment. We see it so much out in the community when we go out and do events and activations that people go to, yeah, no, I do red light therapy. I do an infrared sauna. And we go, well, you're doing a far infrared sauna. You're not doing near infrared or red light therapy.

And that's fine if all you want to achieve is to detox. But if you want muscle recovery or skin benefits, then you might want to look at some of the other frequencies as well.

Ads 36:06

Let me ask you something a little bit personal. How do you get yourself out of a bad mood? It can be hard, really, really hard, and it only gets harder the longer that you're in that space. That's why I'm a big fan of today's podcast sponsor Organifi. They made an amazing product called Happy Drops, and they're little gummies

that are super tasty and they can help make your bad moods better and your good moods great. I'm sure I'm not telling you anything new when I say the world is really stressed out right now. You can see it everywhere. Stress and mood related visits to the doctor's office are skyrocketing along with various prescriptions to match. And so if you are anything like me, you're looking for a safe, natural approach to rebalancing your happiness and your stress chemicals without worrying about the side effects.

Well, Organifi has given us exactly that. They're called Happy Drops, and they're my favorite new supplement. These yummy little lemon gummies are made with ginger, with gouda cola, and passion flour, all of which are shown to have positive effects on mood and emotional wellbeing. Plus, they have a real powerhouse ingredient, which is saffron. So why is that so cool? The compounds in saffron are shown to help your brain modulate its levels of serotonin. Serotonin's one of your happy chemicals and saffron helps your brain enjoy it longer. Saffron also relaxes you. There's many cultures around the world that drink saffron tea before they go to bed 'cause it helps relax them and helps 'em go to sleep. Saffron also contains antioxidant properties, which can help you protect your brain from oxidative stress. That's great for detox. Best of all, there aren't any nasty side effects. There aren't any bad ingredients and it's safe to use every single day.

Saffron's traditionally very challenging to find in the supplement world. It's difficult to plant and to farm. It's even harder to harvest, and it's one of the most expensive ingredients on the planet. But now thanks to the super food geniuses at Organifi, we can all enjoy a real dose of real mood lifting organic saffron for less than a dollar a day. I'm excited for you to try them. I think that everyone should. I love their happy drops. Just go to organifi.com/myersdetox and get your happy drops today. When you use my discount code Myers Detox at checkout, you're gonna save an extra 20% off. Again, that's organifi.com/myersdetox.

I want you to go out and try Happy Drops today. Like I said, I love them. I've been taking them on a regular basis to help me to go to sleep at night, to help me kind of relax and get in the mood. You've got nothing to lose but your frown.

Dr. Wendy Myers

Let's talk about the benefits of these lights. What are the various benefits of each spectrum?

Katie Kant

Red light therapy is, like I said, more of a beauty product. So anything you want to target appearance wise, it's great two to three times a week for 15 minutes at a time, and that can really improve the appearance of your skin. If you've got scars, stretch marks, it's great for that redness, tone, texture, cellulite, anything, the appearance of the skin. But the key thing is you don't need to do it every single day. 2, 3, 4 times a week, all you need, 15 minutes at a time. Whereas the near infrared is gonna be more for muscle recovery. In fact, you can explain the ATP side a lot better and how that works.

Andy Kant

The near infrared is more for muscle recovery. So we've got sore muscles. As we age, we start to get a little bit weaker. Maybe we've got joint problems, mild arthritis, maybe we've had surgery and we need some extra assistance in recovery from a holistic standpoint. That is what the near infrared does. I guess in terms of far infrared, which is going back to the sauna aspect, that's detoxification. It helps aid the natural detoxification pathways. It makes us sweat more, actually helps us with heart rate variability on the far infrared side. Heart rate variability is our Body's ability to handle stress and inflammation. So the higher that is, the better. And that's what helps with infrared.

It also helps with resting and heart rate as well. So yes, you'll increase the heart rate and burn more calories like you're doing exercise by having an infrared sauna, but then for many hours afterwards your heart rate's actually gonna decrease, which is very good, and show signals of a very strong cardiovascular system. I guess the way it all works, I mean, far infrared is very different. That heats the body. It's more of a topical application of light where it heats the cells in the body and it

causes sweating, elevation of heart rate, those types of things, which is incredibly beneficial. Maybe three, three times a week is probably good.

The way red light therapy works is it helps to increase energy efficiency at a mitochondrial level, so more ATP production efficiently. A cell has a function in the body. Every cell does something different. You've got cells in the muscle strength, you got cells in the skin, helps with collagen and so on. So when you start to make the machine, which is the cell, the mitochondria more efficient, it can do what it's supposed to do better. So if we shine red light at a therapeutic level, higher radiance between 630 and 660 nanometers onto the skin cells, the mitochondria absorb those, produce more energy so the fibroblasts can start to produce more collagen.

As we age, collagen decreases every year. I think it's like 1% less every year. Collagen's what keeps our face firm looking younger. So that's how it works from a skin level and it works exactly the same near infrared light, a deep cellular level when it penetrates into the muscles and the joints. If you've got an issue with your joints say you've got very sore joints, you start shining near infrared light between 808-880 nanometers at the correct radiance into onto that area, your osteoblasts are gonna start becoming more optimal, function better, which means they'll be able to repair quicker. You might get the temporary relief of pain

If you use it for long periods, your cells are more efficient in that area, so you're gonna get less pain, you're gonna get more mobile, you're gonna feel more flexible. It's just incredible as well because there's been over 4,000 peer-reviewed studies, over 400 doubleblind, placebo, gold standard, and none of them show any side effects either. This isn't like taking a pill and having a whole list of bad things that are gonna happen to you. This is something that nature has given us and it's been harnessed and put in a stronger, more EFF device that you can use without going out in the sun. Let me give you an example of people with arthritis like my uncle in-law, actually Katie's uncle. He has arthritis and when I speak to him, when he's in the UK, he lives further north in the uk. So it's rubbishly weather all the time. It's always raining. It's always cold, and he has very, very sore joints when that weather is happening. And they like to go out to Spain frequently.

When he goes to Spain, he hardly has any of the symptoms of arthritis. The reason he doesn't have that is because he's out in sunlight exposing his body. There's near infrared, there's red light, there's far infrared all in the sun, and that's treating his arthritis. But we're not in sunlight all the time. So why should we have to suffer in the colder months or when there's lower uv? Well, we don't have to. We just utilize red light therapy, which then has exactly the same effect that sunlight does when we're chilling in Spain rather than Lincoln.

Dr. Wendy Myers

And who doesn't want that? I wanna be in Spain right now with no arthritis, no pain at all and glyphosate, free gluten as well. So you guys have a whole range of red light devices. Can you talk about those and the different purposes for each?

Katie Kant

What it comes down to is with red light therapy, it's all about consistency. You can't just do it once and expect to be cured of anything. Your skin is amazing, arthritis to be gone. It's all about consistency. You need to weave it into your lifestyle to do it at least two, three, four times a week. So we built a collection that could lean into what different people's lifestyles and how they would want to take their session 'cause we're all so different. Some people would like the time out of their day to physically sit in front of a panel and meditate or have some dedicated time just for that experience. Whereas other people are so time poor, they want to do their red light therapy whilst they're already doing something else. So they might want to be cooking or reading a book or watching TV whilst they're doing it.

So we've crafted a collection that hopefully caters to as many people as possible, and that ranges from a red light face mask that you can strap on your face and go about the house doing your chores. We get tagged in a lot of content, people doing their Hoover and ironing whilst they're doing it 'cause habit stacking means that they're able to fit into their life and be consistent with it. And then we go through two panels. So we have small, portable rechargeable panels that you can be consistent with when you travel 'cause that's a key thing. You might do it at home, but if you travel, you want to continue that practice.

Dr. Wendy Myers

I have to have my pad when I'm traveling because it's so lightweight. If you're traveling, you're walking 15,000 steps. I like to use it on my lower back or anytime you get injured for super fast recovery, pain relief, and reducing inflammation. It's just a standard in my suitcase when I'm traveling. I love that

Katie Kant

And that allows you to be consistent with your practice. We have portable light weight devices in various sizes, half body, full body, extra large, depending on the investment someone wants to spend, how long they want to sit in front of a panel, how they want to use it. And then we have the full body 360 coverage blanket, which is probably one of our more popular and versatile products. A lot of people are buying that to watch TV on the sofa or lie in bed, fully encased in a 360 red light therapy blanket whilst they read a book. But also a lot of activations and some events are happening with it because you can do yoga and Pilates on it.

So you can actually double up as a practice that you can do your exercise whilst getting your red light therapy as well. We go to our sauna blankets, our infrared sauna domes and our pimp mats in various sizes as well. So it all depends on what the person wants to achieve. Realistically, how are they gonna make it fit into their life so they can be consistent, and then choosing the right product to fit into their lifestyle.

Dr. Wendy Myers

What is your website again, where people can go and learn more about your products and get the blue light blocking glasses, and the red light devices? Do you have PEMF as well?

Katie Kant

Just come to boncharge.com.

Dr. Wendy Myers

Do you guys have any discounts for our audience?

Andy Kant

Yes, we do. If they just go to boncharge.com, type in the coupon code, Wendy, that gets 20% off. It doesn't matter if it's first order, second, third, fourth. It's whoever's listening to this and it's the time to listen to us talk about blue and red light.

Dr. Wendy Myers

Okay, great. Thank you for that generous offer to give people 20% off, because that's really, really helpful. Let's talk about PEMF because you guys also have a PEMF mat. This is something that I use twice a day. It's something I use to charge up my cell voltage in the morning and then do another setting to relax in the evening. It's been so helpful for improving my energy levels and just my overall health and recovery. So let's talk about what that is exactly.

Katie Kant

It's actually one of my favorite technologies. It stands for pulse electromagnetic field therapy, and the easiest way to explain it is it's harnessing certain frequencies again that are found naturally in nature or within the human body to pass those frequencies into your body by lying or sitting on this mat to induce a certain state. The easiest way to explain it is that most people are familiar with the concept of grounding. They understand when you stand barefoot on the soil or the sand that you're connecting with the earth and therefore receiving the Earth's magnetic fields or otherwise known as the Schumann resonance. People are familiar with that because they understand that if you do that for 20 minutes at a time, it can help lower inflammation, help you ground, help you center and balance.

That's just one frequency. There's other frequencies that you can connect directly with your body to induce a different state. So for example, if you were struggling with sleep and you wanted to improve your sleep, you want to connect with a delta

wave frequency. That's a frequency that your body and your brain naturally fall into when you are in deep sleep. So if you want to induce that level of deep sleep, you want to connect with that frequency. You can lie or sit on your mat, choose a delta wave setting, and then that would pass through your body and you can lie in it, sit on it, meditate, read, watch TV for 20 minutes, and your body will start to receive that frequency and mimic that frequency, and therefore fall into a deep sleep.

And the reason your body does this is it's always looking for ways to conserve energy. So the body will mimic the frequency of the environment or the surrounding area that it's in. The easiest way to explain it is if you've ever been around someone that's highly stressed or highly strung, or you've walked into a really hectic supermarket or a stadium where there's high energy and a lot going on, sometimes you can feel stressed or pent up or worked up. Some people become quite sensitive and induce a lot of their anxiety. That's because you are taking on the frequency of the area around you. But you can use that to your advantage. With a PEMF mat, if you are feeling anxious or stressed out, you can then choose more calming frequencies to pass into your body and get your body to mimic that frequency.

So ultimately it's just a way of conditioning your state by using technology to alleviate that. So in the AXS we have Delta waves to induce sleep. We've got the Beta waves for the Schumann resonance and you've got alpha and beta waves depending whether you want to lean into more creativity, more focus, more energy, whether you want to go deeper into meditation or just relax and calm. So it's a super powerful technology that I don't think a lot of people know about. Also, they expect there to be a physical sensation when we pass into the body. They expect a vibration, but it's nothing. It's still, it's a very calm and relaxing experience, but it really does help regulate any emotions that you're feeling or regulate your energy levels or your sleep cycles in a really simple hack.

Andy Kant

Some very interesting studies are coming out from a medical standpoint as well. When you look at medical grade PEMF on joint healing, when someone says they

had a fracture, the communication pathways between the two bone areas that have been fractured is temporarily said and the communication is lost. And the way the body heals is over time that communication is bonded back. And it takes a break, six weeks to six months, depending on how severe it is. There's been some studies that have shown that what post electromagnetic field therapy can do specifically is actually between 13 and 30 hertz, interestingly enough, which isn't that high. If you're utilizing that as well, it starts to pull that communication pathway back quicker, almost immediately. You've got one left side speaking to the right side of the fracture, which helps heal a lot faster as well.

So if you are using pulse electromagnetic field therapy for, say, a bone fracture along with red light therapy, this is gonna be like crazy healing times, you know? We're starting to see it in elite sport. We've got a really, a really good partnership with Fulham Football Club or a Premier League football club in England. And their elite athletes are using our technology at the moment in their recovery protocols, which shows it's something if their sports scientists are using it because they're always one step ahead of what's coming out and what's new.

Ads 53:04

For anyone listening who really wants to detox their body, go to heavymetalsquiz.com. I created a quiz for you. It only takes a couple of seconds and it's based on some lifestyle questions. You can get your toxicity score and get a free video series that answers all of your frequently asked questions about how to detox your body. Check it out at heavymetalsquiz.com

Dr. Wendy Myers

The pro athletes are using it. You may want to be using it too and take advantage of it. There's so many people that are dealing with inflammation, dealing with pain, dealing with arthritis, and the doctors are only recommending pain medications or just taking your Advil, which destroys your gut and destroys your liver.

It's just amazing the quick rewards you get when you use red light therapy or PEM therapy as well. It's just so easy to do. It doesn't take any time out of your day, and

it's something that I've been using for years and years, especially after I suffered with lower back pain for quite a long time, and the red light therapy saved me. If I did it one night, I wouldn't have pain the next day. If I forgot to do it, I was dealing with pain, so I just learned over time, I just need to do my red light therapy. You guys just illustrated so many different benefits. What makes Bon Charge products different from other products on the market out there?

Because you can go on Amazon, there's like a billion red light devices and I'm always very suspicious. 'cause a lot of those, you don't wanna be buying by price. I think there's a lot of garbage on the market that is not testing, no third party verification is not doing what it claims to be doing. Or it may not even be admitting any near infrared light at all. How would you know cause there is no color to it?

Katie Kant

It's something we take very seriously and it actually frustrates us when we see how much mixed messaging or bad marketing or bad pitches that we see out there at the moment where there's no science backing the products. They don't line up with the literature or the academic studies. So it's something yes, we do take very seriously. To answer your question, we have two doctors in our head office whose sole responsibility is to daily, just continuously troll the latest studies that have come out, the latest academic research, the latest studies.

They are constantly reviewing those, seeing what their latest data that's coming out is saying, and we design our products in line with those studies, with this team. And then we also have our scientific advisory board, which is now up to six members on there now of specialists in various fields, doctors of longevity, cold and contrast therapy, methodology, dermatology, sleep specialists, we've got a wide range depending on what our vertical is, and they have heavy input into our product development as well. So we have a lot of doctors and scientists and a lot of research into the products to match exactly what science is saying.

It's not a marketing product, it's not the latest fad or jumping on the latest trend, it's, well, what is the science saying needs to be in these products? Exactly what

frequencies for what length of time at what a radiance at what power, and that's how we craft the product. And then have the journey of educating the consumer that why this is then better than something else you can get. That's not slating. There are some really good brands on the market, there really are that they equally do their research, but there is just a mass at the moment of red light therapy 'cause it's such a hot topic that people are starting to understand that it's not just for beauty or it's not just for recovery, it's for any aspect of your wellbeing.

It's getting a lot of attention and therefore a lot of companies are cropping up with very cheap products that probably don't have the right eff efficacy behind them. But when we launch a new product, we literally try a product for a good six months, first of all to see if it delivers results. And so many products we haven't gone to market with because they can't fit into my life. I can't be consistent with it. It just doesn't work or it's not the right frequencies, it's just not delivering the results. So it is something we take very seriously.

Dr. Wendy Myers

Oh, fantastic. Well, I love your products. I use them personally. I love the red light, the blue light blocking glasses, the red glasses. These are all the stuff that you're doing. It's a regular part of my health routine. That's why I wanted to have you guys come on the show. So, again, why don't you tell us what your website again is and the coupon code people can get 20% off?

Katie Kant

If you wanna get 20% off, head to [boncharge.com](https://www.boncharge.com) and then enter the coupon code, Wendy, at checkout for 20% off.

Dr. Wendy Myers

Well, guys, thank you so much for coming on the show. Everyone, I'm Dr. Wendy Myers, and thank you so much for taking the time to tune into the whole show, the whole podcast. I really appreciate you taking your precious time to sit with me. My goal with this podcast is to help you with that discernment in your health decision,

help you steer you with the products that I use and recommend, and just give you those little pieces of the puzzle that you need to improve your health. That's why I'm doing this show. Thanks for tuning in.

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