Light Up Your Brain: Red Light Therapy For Anxiety & Brain Health Transcript

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Introduction and Sponsor Welcome

Hello. Welcome back to the summit. Our hormones and mental health summit. Overcoming anxiety, depression and ADHD in women. I'm your co-host, doctor Sharon Stills and I'm super excited today because one of our sponsors is here with me, and we're going to be talking about some of my favorite things trans cranial photo, bio modulation.

PBM is a lot easier, but, it's something. They're actually a company whose helmets I have waiting to be installed in my new clinic as part of our communal healing area.

And so I was super excited when they wanted to support what we're doing here, because their units are very applicable. If you are dealing with anxiety, depression, ADHD, any kind of brain inflammation, brain fog.

And so if you've never heard of trans cranial photo bio modulation, quite them out followed by the end of the next 30 minutes. You'll be a little mini expert on it and see how this can be part of your healing journey.

So very excited for you all to be here. I'm very excited for my guest, Brooke Hill, who is from neurotic, who again is one of our sponsors. And I always say this, but it is 3,000% true without our sponsors, we couldn't put on these summits for you.

And so it's thanks to people like Brooke and her company who understand the power of giving you all this free information to help you on your journey.

And so we just we just say thank you, live out to you and say thank you for sponsoring our summit. And so who is Brooke? Brooke is the consultation and research team coordinator at neurotic, where she leads a research team dedicated to advancing neuron efforts in client consultations.

Obviously, research, clinical integration and customer success. She's a certified light therapist, and she is also completed Advanced Health Coaching certification, including Epidemic Answers and Apollo Recode 2.0.

She has experience in complex health conditions such as Lyme pans and pandas, mold illness, digestive disorders, and she educates individuals on integrating light therapy with broader health strategies.

And if you know me at all, you know I'm obsessed with light therapy and how light heals. And ironic.

What PBM Is and How It Works

The entire team is committed to empowering individuals and practitioners to harness the potential of photo bio modulation to improve both mental and physical health, and chronic also strives to advance the photo bio modulation industry through innovative research, which is what I love about you guys delivering effective solutions to help clients maintain optimal brain capacity at all stages of life.

So thank you. Welcome to the summit, Brooke. I'm super excited to have this conversation with you. Thank you for having me. My pleasure. I like to me is some of the most powerful ways we heal.

And I love to wear my helmet. I'm not dealing with anxiety or depression or brain fog, but I wear it for, prevention. Right? Like, just to keep the juices flowing and the inflammation down and the lymphatic moving.

And so, I guess let's just start because I'm sure there is a lot of women listening because transcranial photo bio modulation is not a household word.

Right? Like, I think red light therapy is becoming pretty well known, but I'm sure there's a lot of people listening who don't know what that is. So if you could just start by explaining what that is and how does it work?

Why is this so important for brain health? Of course. So, and I'll just call it PBM as a shorter term. But, it just really means the effect of light on the body through cellular processes, primarily photochemical.

But, researchers are also exploring potential energetic and quantum mechanisms. But, TPV, it's a therapy. It's usually red or near-infrared, and it stimulates your brain cells.

The light can activate the cytochrome c oxidase in the mitochondria, which is part of the electron transport chain. And absorbing this light energy leads to increased mitochondrial metabolism.

So basically it's just increasing your ATP. And that means there's more energy for your brain cells to function better, which when that happens you can improve your mood, your focus memory.

It also reduces oxidative stress by releasing antioxidants. So that can be neuroprotective as your as how you're using it. And other benefits. There's improved blood flow to the brain reduced inflammation that there are studies showing it modulates cytokines.

So it reduces pro-inflammatory cytokines and increases anti anti-inflammatory cytokines and increases neuroplasticity plasticity which is just helping your brain grow new connections which we all need.

So for for for some of these conditions like ADHD or anxiety. It could be it could translate into improved focus or emotional regulation or and resilience.

Wow. That's that's a lot of good stuff. So let's kind of, let's break it down a little. So let's do anxiety first. What what do you see? With women who are dealing with anxiety using using and maybe just explain like what the helmet is like.

I say helmet like, it's not a football helmet. Hey, I can I can show one. I can't see my video, but, okay. I can show I don't know if this is in the screen or if I have a blurred background, but, I got a little up.

Yeah, that. That's good a little back. There we go. Let me, let me just. Yeah. So it's it's like wearing, like a bicycle helmet. Right. I think that explain it.

Unhook it so you can see it properly. There. So is it is like wearing a bicycle helmet and, inside are the LEDs. And you can't when it's turned on. There are little indicator lights that are red light, but those are not.

Those are just showing you it's on so you can't actually see see the light. If you have an older camera and you do the front facing camera, you can actually shine it on there and you'll it'll be like a little purple, faint purple.

So you'll, you know, it's working. You can buy filters to, to see, but, usually we just try to use that front facing camera to see how it's working. But yeah, it's just it just locks on like that.

And, honestly, you can use it. You can use it on such rounded joints, elbows I love to use everywhere. And I put it on my face if I need to take a nap, it puts me to sleep.

I just think that, you know, I forget. That's such a good reminder. I forget you can do it on joints and I've never put a helmet on my face. And skin two.

Is it like therapy? It it it because it's far enough away. So it's a deeper wavelength so it can go 3 to 5cm through tissues. And it really depends on your face size and how far you can get your face and that size.

So it all depends on that. I literally is it because it increases my melatonin and it puts me to sleep, and I'm not able to take naps. So I use it for that and it feels really warm.

I guess if you're claustrophobic, you may not want to do that, but I think it feels really nice. It's like a little warm hug. And could you speak to why you're using it on joints?

Some people just don't have any other light therapy devices. And they ask their, you know, they ask, what can I can I use it for arthritis? And we've had clients who have only used it on their brain, and their arthritis has improved by not locally putting the device on it, but it makes, you know, there's a systemic effect, there's a local effect.

But we have had we also have, people who like to put their pet sport in it as well. Yeah. But you if you think about it, you're actually you're getting all the acupuncture points to if you put your hand in there, but it's just such a nice shape for like an elbow or a knee.

I've, I've had clients use it on their knees quite a lot. I just wear my helmet, like in bed, and I read while I'm wearing it.

Using the Helmet for Anxiety and Stress

So it's just something that's really easy to do. Just that's how I use it. But now I'll have to put it on my face and my elbows and play with it a little.

And you talked about pets. I have a colleague, Doctor Marlene Siegel. I bet she's doing it. If she's not, we should connect you because she does everything for animals that I do for humans.

So it's. Oh, it's really interesting. So, anyway, back on track, know we were talking about anxiety. So I wanted you to see it because, you know, if you're anxious and you hear helmet, it could sound claustrophobic.

So I wanted you to see. That actually looks very cute. And it's it's not a claustrophobic experience at all. But what have you noticed around women who are having anxiety, any perimenopausal, menopausal or just anxiety in general?

How this is really helped. And could you speak also about the wavelength? Because there's different options out there and you have a specific wavelength.

And so if you could speak to why you have the wavelength that you do. Yes. So we have a 1070 nanometer wavelength. And so it's a bit longer than other wavelengths on the market, which are usually around the eight, 10 or 850 nanometer wavelength.

We find it more effective. The studies have shown that it penetrates further and deeper into the brain. So it could be reaching the areas like the prefrontal cortex, the hippocampus.

And those are very key for memory, mood and focus. And of course, it all depends on your brain and the skull density and, and your hair as well. But the longer the wavelength, there's also less scattering because there's less absorption in different biological tissue.

So it'll interact less with water, with, hemoglobin and other cellular components. It's it just can get through further with more energy. So that's why we we like to use that wavelength.

Okay. Awesome. And then as far as anxiety. And then for anxiety, there's been studies that show that it can the TBM can calm over activation of the amygdala, which is your brain's fear center.

And it can, you know, also provide energy to like the prefrontal cortex and just create a balance and a sense of calm and resilience. So there was one study that was showing, they use the Hamilton Anxiety Scale, and they showed that the TBM could reduce, after I think it was two weeks, it reduced US 63% of their anxiety symptoms on the Hamilton anxiety Scale.

But for like any type of stress, whether it's physical, emotional, it's redirecting your brain's energy towards defense

systems. So you just have less energy for all the regular functions and cellular repair and maintenance.

So the just that extra energy helps rebalance this, and it allows your brain to use those resources as it sees fit. So two weeks, is is that every day?

Is that all day long every day? Because that's pretty quick. That's very like exactly long. Do you wear it to have that kind of, you know. No. It will always depend on the individual and of course what other root causes they have for their anxiety.

We typically across the board, most people see results two weeks onwards. They're, they're very few that do need the full three months before they see some, some sort of change.

But to two weeks, four weeks would be a good average. We've had there was a client with depression who and I wish I had the number of weeks. It was a couple of weeks again.

And she just said the veil lifted like she was so depressed, but it was just just lifted enough for her to function. It didn't clear the depression, but it made everything more tolerable.

She could get out and do things more motivation to do regular tasks. So yeah, 2 to 4 weeks, potentially. 5 to 15 minutes a day or three hours a day or how long.

And that's so that I can give you a guideline. But again, everybody's different. We have one very sensitive client who uses a minute a day. We have others who do 30 minutes twice a day.

So it really depends. If you're a person who's super sensitive to, say, pharmaceuticals or changes in the weather, those clients, typically you would start low and just gradually increase.

If you feel you are not very sensitive, we have preset protocols, which the max is ten minutes on one of the programs and then nine minutes on another and down.

So you could start with one of those programs. If you're fine, you can work your way up and do it twice a day. It could be, sorry, my alarm just went off, but, you could use it gradually is how we would increase it gradually every couple of days.

If you're not having any overstimulation and symptoms, which is rare, but there is just, like anything, if you do too much, it could we have there's a biphasic response.

And if you have done too much, you potentially they found in research it's just you're actually created reactive reactive oxygen species. So it the other theory is that you have your body is doing so much that it's dealing with like a herbicide reaction and stealing.

It's trying to detox all these things that's been stirred up. But regardless, it doesn't happen very often. But it might there's symptoms might be fatigue, congestion, maybe a mild headache.

But whatever you might feel, if it's negative, it usually passes less than 24 hours. So that's if you do too much.

Sleep, Memory, and Brain Health Benefits

We maybe see that in like 1% of our clients, and they typically are those very sensitive, very sensitive clients who have to go down to like a minute a day.

Gotcha. Is there anyone that this would be contraindicated for? Yes. So we there are people with like gunshot shrapnel, metal implants. So there's the potential.

Depending on the type of metal, it could heat up. And so we we recommend they speak to their practitioner.

Pregnancy obviously I spoke to your practitioner.

Hypothyroid condition. So for thyroid it it can upregulate the hormone. But the the the theory. Well if it's upbringing relating your hormone, if you have hypothyroid maybe it will also be contraindicated.

It might appear like upregulated it further. So there are no studies that I'm aware of but that just to be extra cautious and cancer if you have a brain tumor.

We we've seen studies that show, light therapy can help the immune response with cancer, but there's also the potential that it can increase the blood flow to a tumor.

So we recommend not to to use it for that or to just to speak with your practitioner and get cleared. First with just brain cancer or tumor or anywhere.

Or potentially tumor anywhere. We would just we would be on the side of caution. Okay. And then, you said that it can upregulate thyroid hormone. So we know that low thyroid hormone can be in and is often a leading cause of depression and anxiety.

So do you have any studies? Do you have any experience with women using. Because a lot of times women say, you know, do I have to take thyroid hormone forever?

So do you have any experience with using the helmet to up regulate and maintain thyroid hormone, where maybe they can lower their dose or go off of it?

I don't have any studies that I have come across, studies where they've shown that the the thyroid metrics in the lab measures had improved, but I've not seen further about how the longitudinally how long did it does it remain high or are they continuing?

Did they just stop at the end of the study? So no, but it's the whole idea is, that the TPM can stimulate the mitochondria and the thyroid cells, boosting the energy production for hormone synthesis, reducing inflammation.

So I would I could look and see if there are any other additional studies. But at the moment I don't I don't know of any that have actually monitored and seen if people can change their dosage or come off.

I guess we're going to be doing a study at my new clinic. And what about another big, concern is insomnia. So how does the helmet help? Because I know a lot of women listening are dealing with insomnia always that perimenopause menopause is very common.

Yes. So for sleep, we almost a huge majority of our clients, regardless of what they come to us for, will report improve sleep. So they they may even have come to us for memory.

But they're like, well, my memory hasn't improved yet, but my sleep really has. So, so sleep is but insomnia in particular versus just quality of sleep.

As far as the research studies, I don't know if they've distinguished the in the onset of sleep. It does. We know the studies have shown it increases melatonin.

So it makes sense if you're if you need extra melatonin to sleep, that would help the onset of sleep. But in terms of, insomnia, I think the majority of our clients actually, after it was a mix, we've had a mix of difficulty, onset of sleep and waking, like a lot of night waking, restless sleep.

There's been a there's a quite a variety, but they we have looked at a few of those to see if we could find a pattern in their brain maps. Like, sugar is like a you can measure the electrical activity with electrodes and then using software, you make these brightly colored brain maps.

And the there has been no pattern, but there tends to be a balancing of the brainwaves. So a general improvement in whatever was off tends to just improve.

And that's kind of the overall statement we could say for sleep. But yeah, we've seen a lot of people also measuring with their whoop whoop strap they're ordering.

So they could actually have quantifiable data because it's they might just say, I have better sleep. But for them and for us, it's just nice to see quantifiable metrics as well.

Yeah, I wear an aura and I had never heard of the woop. But now you're the second person in the last two hours, but I've mentioned the Woop to me. I had a patient talk about her. Woop.

I was like, what? So now I gotta go look up the woop because I don't know about the week, but I've been wearing an aura ring forever. I also want to ask about just memory dementia prevention of Alzheimer's.

This is a big, you know, a lot of women in their 50s, 40s, they see their mom. It's very, you know, go through dementia and they want to make sure that doesn't happen to them.

So how does how does this play a role in prevention? So I think it just goes back to the improvement of energy in the mitochondria. So the mitochondria can there's there's increased blood flow.

There's all the different forms of dementia. And if you have insufficient blood flow, of course that can contribute to one form. If you have the. So back to hormones.

So insulin they, there are studies showing the three hormones that I recall from the studies were insulin, cortisol oil and melatonin are modulated. And then if you can improve your insulin sensitivity well then you can improve the nutrients and regulation to your everything.

Everything. And also there are studies showing that, it was a mouse model showing that the plaques literally would reduce in the brain using, the near-infrared light while you were using it.

So if you are at advanced stage, this is the, the intervention, it wouldn't be a oh, just use it for a few months and you'll be fine. No, it's that's the case.

You're going to have to use this forever. And if you're a very advanced stage, the best you might hope for is to reduce the severity. Or just sort of pause the, I think of the word I'm thinking of, but basically cause the decline is what I'm trying to say.

ADHD, Combination Therapies, and Clinical Uses

So if you are a very early onset, which is what our clinical trial is for mild cognitive impairment and early onset Alzheimer's, then the the hope is that you will see bigger changes.

It's everything from the improved, blood flow, the improved energy, improved mood focus, executive function that those will translate into, preventative health for your brain.

And feel like they should be in every nursing home, every old age facility. And what about ADHD? What do you notice with the ADHD? Or do you have anything that you've done work with with people on the spectrum?

Yes. So for ADHD, so we found that, well, it can be related to multiple causes, but if there's a neurotransmitter imbalance, if there's a change in functional connectivity in various brain work brain networks, inflammation can also cause a dysregulation of the neurotransmitter.

Some systems so that the light can restore balance to those networks. And, in some studies that they have shown that specifically stimulating the right prefrontal cortex could help with attention and executive function.

But the evidence is limited. I think there's only three clinical studies so far that have been published, but the preliminary findings that showed that it could be a really good, potential therapy for ADHD, they found across those three studies, significant improvement in or ADHD, symptoms of mood, better sleep wake patterns and on different neuropsychological tests.

They had improvements in focus and cognition. So and then in just in terms of one of our cases, we, we had a client kind of goes down to the combination modalities.

One client reported substantially improved focus and cognition after they combined the, the helmet with neurofeedback. And so the theory is a neurofeedback is for anyone who doesn't know.

It's where you, monitor brainwave activity and the person is has electrodes on their head with like a, a gel. And they're looking at a video or hearing a sound and they're training their brain. So, that was a really powerful combination for that client, is to have the energy for the brain to then utilize the training better, and then results are faster and hopefully will be longer standing.

Are there any of their you said neurofeedback or are there any other combination therapies that you see work really well with the helmet? Yes. We have a clinic who specializes in hyperbaric oxygen therapy, and they are finding really amazing results with clients with especially TBI and head injuries.

But also memory issues. And, and the way we think of it in there are, there are some studies on it that it's the, the light therapy prepares the cells to utilize all that extra oxygen more effectively.

So it's just enhances or amplifies, cellular repair. Overall brain function. So we do at our new clinic, which will be opening in September, we're going to have we're not doing hyperbaric, we're doing oxygen bathtub.

So I might say, actually a more profound way to get oxygen perfused into a person. And it's much more enjoyable. So we're going to have the helmets and then put people into the bathtub.

Oh, exciting. Yeah. I'm super excited. I think I'm, I, I just think this one little helmet has so much potential because our brain is so important and so what are some options as we're winding up.

Like how can you because you what I really love about you guys, I mean, I love your product, but I love like you're very research orientated, you're very educational orientated.

And I think that's really important to really move this field forward. So for women who are like, I want to wear a helmet, like where can they learn more?

Well, our for our website, ironically online. And we have, well for this, for this, summit, we are giving away the masterclass for free, for any of the listeners to use the code free course.

And that way you can learn from you. Really, we give like, like doctor still like we give something to tie it back to the summit. So is there, code you can give, like, you know, hormone summit?

Oh, we can give the code for the helmet. Doctor talks ten the course. I can ask them to change it. I could probably make it right now, and then we'll go ask them to change it.

That's a great idea. How about hormone course? So our hormone summit. Hormone summit, like that. Okay. Thank you. Usually sponsors give like, my link.

Like my code with you guys. Do we have a co. Let me see if we have a code. If you're an affiliate on here already. Yeah. I forget when Austin told me.

Obviously. Carla, you're going to edit this. Yeah. Thank you. Carla. Still some. Let's look. Okay, I think I see I can see your code. Okay. Doctor. Stills 100.

Where to Learn More and Closing Remarks

But that's going to be $100 of. That's fine. Let's do that. One, doctor. Stills 100. Can we use that code for both so it doesn't confuse them? I think you just know how people, can complicated these.

Exactly. I'll ask the, I don't know if we can use the same one for both, because this is in Shopify. Okay. Or can use doctor stills and then doctor stills 100.

Yeah. And that we could do. Okay. Why don't it just make it easier. All right. So I'm going to we're going to start again. So for women who are interested in learning more or like I'm on board I want my own helmet.

Where can they learn more. So we you can go to our website neurotic dot online for anyone who wants a deeper dive into PBM. And we're giving away our masterclass free to listeners.

Just use the Code Doctor stills to access it. And if you're interested in trying one of our helmets, we're also offering a discount code. Doctor stills 100.

But even if you don't purchase our device, if you just learn a bit more on how light impacts to your brain, you might it just might transform your approach to health.

And you can visit our, if you visit our website, you can join our newsletter also to stay updated on latest research and events. And we have a YouTube channel as well.

And you can find many videos there. We even have one from our research coordinator who specifically covers the studies on anxiety on TBS, effects on anxiety and depression.

So I think that might be really helpful. And we'd love for you all to be part of our growing community. Awesome. Well, there's lots to check out. So good and erotic any you are.

Oh, and I see that online, not.com. This is, you know, a really important tool whether you are struggling with mental health issues or here because you want to prevent them, or because a family member has them, it's noninvasive.

It has profound effects on so many levels. And so I'm excited, I love it, I'm so excited. I'm trying to figure out how we, you know, like in the olden days when you used to go to the salon and you would, like sit down and the helmet would come over to get your perm, that's what I want to have.

I want to have chairs with the helmet attached, and it just comes over. Instead of getting your toxic perm, you're getting healing and light for your brain.

So we'll be doing that at Listing Wellness Center. Go to neuron a.com. Check out their YouTube. I didn't realize you had a YouTube. I'm going to go check that out.

And thank you. Thank you for being here. Thank you for being a pioneer and bringing this really important modality. You know, I often say not all medicine comes in a pill bottle.

And it certainly doesn't. You know, these helmets are profound. You can take lion's mane, you can take some things. And I'm not saying not to, but putting a helmet on your head is going to be such a lever puller, more than just taking a supplement or an or do both together.

So thank you again, Brett. It was lovely to meet you this my first time meeting you. Thank you for sponsoring. Thank you everyone for being here and literally open your minds to new ways of healing.

So, we'll be back with another talk and we'll see you then. Thank you.