Introduction and Background

Well, Andy, what a pleasure to see you again. We were both trying to work out. I think it was a good 2 or 3 years ago when we last chatted. And so much has happened in your life since I said you would give me a little bit of behind the scenes information.

And I'm very excited to have you on these doctors talk to help people with mental health and anxiety and depression, and understand in more natural ways and other ways of helping people to manage their mental health.

So welcome back. Great to see you again. And please tell my little my audience a little bit about yourself. Yeah. Of course. Always, always a pleasure to speak with you, Caroline.

And yeah, it's been a while that, you know, we've been in been in touch via email and there's tons been fantastic. But yeah, I guess my background is I'm British.

I live in Australia. I moved to Australia about 12 years ago because I was fed up of never seeing the sun in the United Kingdom. I see lots in how is do you do?

Yeah. And yeah, like my journey began with with light really leading to Australia. But in terms of trying to help other people, it was about six, 6 to 7 years ago.

I got in a real sort of bad way with my weights and my health comes down depressed, anxious, overweight, really not in a good space. So conventional dieting didn't help me.

Went on a low carb diet, lost a lot of weight that I did that for my own learning. So what that prompted me to do after I'd lost away started to feel a bit better is I went into this optimization phase where I was like, well, what more can I optimizing my not?

And the biggest thing that I was lacking was my sleep. And I kept reading, you know, sleep is all about like the the cornerstone to longevity to help helps with, you know, so the metabolism helps with mental health, physical health.

So I started looking into the components of of sleep and how I could improve the quality of my sleep and the constant my sleep. And I discovered. That, hey, can I interrupt you for a second?

I'm sure you did some of that reading that made you terrified as well, because, I mean, it's just so much almost negative stuff about sleep and that's, you know, good to know, passive.

But we've got to balance the negative with the positive, realizing that if I'm terrified of people thinking, I've got to do all these things, that's actually worse for you, they're not sleeping, you know, just make you not sleep.

So I didn't want to do that. I just wanted to because I think we had mentioned that before in a previous interview. Is it likely it's scary, the stuff out there on sleep, we kind of have to calm down a little.

Yeah, absolutely. And the good the good thing is it's an easy fix, right. That's. Yeah I think numbness some days you're not talking life changing protocols to fix it.

You're talking a few little. See you and then we'll talk about later. But yeah it's I think was there's, there's some sort of condition I think it's called like or the phobia or something like that.

When it's the sleep trackers people are wearing that they get so obsessed with them, they actually are waking up in the night looking at it and making sure, yeah, I think counterintuitive to what they're trying to do.

But yeah, no, you've got to be positive of these things. And, you know, that led me to find that light and how that impacted sleep. And that's how my company Born child was born.

It was a bid to educate people on how to improve their sleep, using light as one of the mechanisms. And then we invented another product to help with that, based on what the academic literature at the time was, was saying things like blue light glasses, sleep friendly light bulbs, red light therapy and things like that.

How Light Affects Circadian Rhythm and Hormones

Amazing. And you've since a lot. So you've developed so many new products and towards the end, I'd love to get you to tell the and listeners and viewers about that, but I'd love to start with you.

Like you saying light can impact sleep. We all know that. And I know that one of the routines that is part of my life and that I told my patients and things is first thing in the morning, just wherever you are, even if it's the great overcast outside, just get that light, just stick your head.

I can make sure you get like new eyes as soon as possible. And we know that it's so important and it's all then photons and light. Without getting too sciency, could you just dive into the importance of light, the impact on sleep, stress, anxiety, and depression?

Yeah, absolutely. So we have on body clocks, right. So Kate, you can read them. This is the technical word for it. And they're governed by light that ancient.

So we had these millions of years ago as we were evolving. And they're all triggered by the rising of the sun and the setting of the sun being outside during the day.

That helps us regulate our holdings correctly throughout the day. So serotonin doped any cortisol regulates them in a perfect harmony. The issue we've got now is we've got artificial light, which we didn't have when we were ancestrally or even up to like 150 years ago.

We didn't have this in our lives who need light bulbs. And that's very different to how the sun's light changes throughout the day. So we're constantly fed the same frequencies of light at any time during the day.

So that's tricking our body into thinking that it's daytime all the time. Even if we're having dinner in the evening under lights, it works. Opening off bridge.

Very light coming out at us on overhead lighting in offices and light, you know, as you watch the TV or scrolling. So that light is continually sending signals to our body clock saying it's daytime.

Stay awake now the issue with that is, yeah, you can stay up late watching your favorite TV shows or socializing, which is which is great, but it has a negative impact on our hormones, specifically cortisol.

Now, we've seen from various studies out there in the literature that it can disrupt the cortisol cycle. So cortisol is a good and a bad thing right? It's really good in the mornings jumpstart you get you out of bed and keep you active during the day.

All this all awakening response so important. And that's triggered by the blue light in the mornings. And our circadian rhythms be in trained by that light.

Now if that happens continually at the wrong times of the day, we get a dysregulation of our cortisol, where cortisol can. Two things can happen right to the first thing.

And the cortisol cycle could flip, which means that you struggle to get up in the morning and you feel really down and depressed in the morning. Struggle to get yourself motivated.

But then you sit down in the evening and your cortisol levels are high. You can't sleep, you're happy to stay up late, and that's really bad. So obviously, you know, health.

The other issue that can occur is that cortisol can become chronically elevated, which means that when you're in this sort of fight and flight sort of situation all the time, you can then become really depressed, you become anxious, you really sort of hyper aware of things and stress and it's, you know, it's a part of that is down to being under the wrong lights at the wrong time of the day.

And we need to take steps to be outside more in the natural light, but also managing the artificial light, because I don't want to scare anyone. You got to live outside and you can't watch TV and can't put on your lights.

And that's why our company. Is so realistic. Yeah, exactly. And that's why one child was born. It was let people enjoy these modern conveniences and luxuries but without disrupting their hormones through mismanagement of artificial light.

Okay. Well that's fantastic. So can you tell us what people it will be on that lighting? What can people do? Some of the things that people can do now, immediately, today, as a leader in this interview, and then we can talk at the end about your products and things that what could they do right now?

Yeah, that's a great question because there's so many three things people can do to optimize their like hygiene. So the first thing best thing you can do is what you mentioned, Caroline, which is going outside and making sure that your eyes, expose to natural light before any other light.

Okay. It doesn't matter if it's cloudy outside, rainy, get outside. Not not a window because that changes the frequencies of light physically. Outside. Just for a few minutes.

And let yourself let a natural light go through your eyes and your skin. And it will tell your body clock the correct signals and you're still amazing.

Just a few days of doing that. You know, you could even replace caffeine in the morning. It's that powerful. So that's really good. The other things you can do is during the day, if you're working in the office or you're working inside, or even if you're just home at the weekend, try and get outside a few times during the day.

You know, you can just go out for what I like to call some breaks where just for a few minutes, you go outside, get the sunlight back through your eyes again for a few minutes.

I'm not talking about staring at the sun, just just being outside and in the light. And I think that that then allows the body to check it and go, okay, well, it's this time of the day now.

These hormones need to be suppressed, these hormones need to be released. And we just get this optimal hormonal balance. You need them go. If you want to go even further, you can you can watch the sun set as well.

I know that's not always practical. Probably the least important out. And the three things I've mentioned. But watching the sun set as well, that triggers cortisol levels to decline because you're getting more red light into your eyes, which is very relaxing and soothing.

And it then triggers a response to the central clock system to say, okay, well, not time's a crow. Check it out. Let's drop down the cortisol, increase melatonin, which helps you to relax and at ease and chill. Ready to sleep.

So those three things are great for doing. You can also do things like when you're on your laptop or your MacBook or whatever it might be. There's a little setting in, in the settings section which allows you to use the blue light.

Oh yeah. Yes. Great isn't it? You can just pull that down a little bit. Yes. So when it's blasted blue light into your eyes, if you have like a soft blank or something like that, you can have that next to your computer which helps balance the blue light like you'll about balance, right.

The sun is very balanced in all the different colors. Think of the rainbow. Where is your laptop computer is all blue and green, and only a little bit of the beneficial red light get like a nice so lamp stick that next to your computer and you're so really relaxed whilst going about your day as well.

And just instead of breaks from screens, right, like so many people on their phones all the time, like let's be mindful, let's just sit somewhere, maybe outside, maybe gather your thoughts.

Don't always have to be doing something like being on your phone, because that's overstimulation as well as so much more artificial blue light coming into your body as well.

And the final as well is deep neural net pounds a lot. You know, that's hard to change sometimes. Yeah. And you put your phone on nightshift mode during the day, which reduces the blue light down.

So you just get any less sources of artificial blue light that sort of around you during the day and also into the evening as well. So that probably that's the three easy things to do that that will just change your life in terms of better sleep and better circadian health.

That's fantastic. Well, that's really helpful and useful. And, you know, it's just it's not that you're not saying that phones and things are bad. What you're trying to say here is that there's a balance.

You just to be exposed to one too much blue light is too much for anything is is a problem. So it's to get balanced stories about balance. So that's a really great tip.

Thank you so much Andy Reid to talk about red light. The the just before we do that there's something that you commented on. The sun lifts the mood. What do you like promotes feelings of anxiety.

Can you talk about that in terms of because you mentioned about sunrise, sunset that can calm you down and sunrise in the morning and those kinds of things.

And being in the sun, we all know that that leaves a mood. I mean, you just have to look at a sunset. It's just that sense. It's like in me, it's just it's hard not to look at a sunset or sunrise and think, what?

Then you start talking about how black can promote feelings of anxiety.

Practical Light Hygiene Tips

It's not all blue light or it's not little bits of it, it's it's quantity. So can you talk a little bit about that. And just in terms of the balancing again, because I think people sometimes do so much sorry.

There's so much emphasis on this is not so bad for you. Nothing's bad for you in the right quantities. Yeah. 100%. Right. And that's the thing I don't want to demonize blue light blue lines.

Fantastic. During the day, the sky is blue. I think the the feelings you get on a lovely sunny day. The sky is blue. It's it's a it's an incredible feeling.

And blue light is important during the day from natural sources. It's it's allows allows you to keep you waiting. It allows dopamine and serotonin to be produced in the body.

It pulls up cortisol in the morning, which is super important to have. Cortisol is not a bad thing. It's it's context. You know, now the issue we've got is we're exposed to blue light.

Just continued fate. That's the issue. Yeah. Yeah. And into the evening. Right. But it's also if you get blue light the wrong times of the day, it's stimulating the wrong hormones.

So like a gene the last, the end of the last question on the free sort of she can do with watching the sunset in the

sunrise is that that's all red light.

And that's very soothing, relaxing, calming. When you go into the evening, the body isn't used to blue light. Think about ancestors, right? Think of them.

It's like red orange light that relax that chatting, that buzzing. Then they go into bed. There's no blue light present. There's no sun in the sky. You've got the moon in the stars.

But the the intensity of that light is minimal. It doesn't impact pedals. What we're doing is we're going off the dark of the sunset and we should be exposed to red light.

We're putting on our house lights. We're looking at our phone, watching the TV. We're opening the fridge on our laptops. That blue light is telling our body to release more cortisol, which is then causing us to be stressed more and more or or to have the wrong hormone at the wrong time of the day is always it is an energetic hormone.

It keeps us alert and awake and and alive during the day. Focus and. Focus. Yeah, absolutely. Great point. But then in the evening, we don't want to be really sort of energetic because we want to be relaxed and sort of dozy and chilled relaxed.

And the blue light isn't allowing us to do that. So we're continually exposed to it, so continually exposed to cortisol, which just over time we need to, you know, seal in a bit low.

It can then lead to stress, can then lead to anxiety. And it just progressively might get worse in certain individuals. The blue light during the day is great.

You keep you alert and awake. But the problem is balance, right? The sunlight is completely balanced. We have blue, gray, yellow, orange, red light all in isolation.

The whole spectrum of light and blue light is bright during the day from the sun. It causes, like I said, cortisol dogma. In serotonin production. The issues with blue light during the day.

Freedom from the sun is it causes cellular damage. Now, what the sun has in it is a lot of red light, and that cellular damage is instantly repaired because it has soothing feeling the frequencies of red light in it.

The issue we have with artificial sources. Blue light that is very high, red light very low. So we get all the benefits of the ignite that we do from sunlight from our computers during the day, but we get none of the repair happening.

So, you know, we might age faster being in front of the the computer, we might have more cellular damage, which can lead to other, you know, an unpleasant health issues moving, moving through life.

So it's all about balance the blue line. Like like you said, it's context. It's blue light. The time of the day, the amount not blue light, but also how balance that spectrum of light is in terms of whether it can be classed as well.

That's unhealthy. Blue light or that's healthy blue light. I love that, I really like how you explain that. And I think that was important for people to just get that perspective as well.

And a lot of people may already have an idea of this, but it's really you explained it so well. So thank you. So let's transition over to why infrared sauna and especially, you know, the red like ones.

And you know I have this infrared sauna. And I am fortunate to have one at home and I sauna every day. And I always put my red light on. I've got all the different color lights had. Red is my favorite.

And I know that kids, you can buy all those great mask to put on your face, for the red light for your skin and you know all these. So let's talk a little bit about red light and saunas and how that can help us.

So you've already mentioned a little bit about the red light the sun sets. And so on. So if you could talk about it in terms of soreness and maybe in terms of those masks that people put on for their skin and that kind of thing.

Yeah, absolutely. I saw the sauna. So we're talking here about far infrared light except for infrared. And here infrared people get confused about what they used for.

So far it's the red light is what's found in infrared sauna as an infrared sauna blanket. It's an invisible frequency of light, and it's used for heating purposes.

So it heats the body directly rather than a traditional sauna which uses coals or something like that which heats the air around you. So it's more effective to use infrared light.

The eating, because it can penetrate deeper into the skin. It allows the environment around you not to be really hot. So you know your head can get really hot, things like that.

It's it's a targets. The body type is deep into the muscles. So it can help me with muscle recovery in how we would like sort of detoxification.

Red Light, Infrared Sauna, and Recovery

So it helps you sweat more to allow you to get rid of some of the impurities that you might have absorbed during the day, just just from everyday life, you know, just being outside and you can get stopped.

Pollutants and things. It helps. Absolutely. Yeah. And the you know some some sort of preliminary studies are showing that actually it salt boosts endorphins.

So it makes it that people are sort of saying this, this thing like post sauna high rate. And so they have this sauna, this infrared sauna, they come out and they seal absolutely like euphoric, great and relaxed.

And it really boosts and moves and it's just how powerful light can be, right? Like in different frequencies. And each frequency of light has its own benefit.

Far infrared light whilst heating you over a certain period of time can help you feel very euphoric and happy after you've had it. So it's always great to to use when you feeling a bit down, or even just as a general part of your wellness routine.

It's also fantastic for sleep because it really relaxes you. It keeps you so it reduces those cortisol levels down, makes you feel relaxed and chilled.

And it's it's great to do before bed. You know it's like big thing at the moment. It's trending is ice baths. But if you did an ice bath just before bed you're going to be all wired and wide awake.

Whole thing. Yeah, yeah. Moaning get you awake now. Red light therapy is different from infrared sauna. So that uses visible red light and it uses near infrared light.

So red light and near infrared light specifically in six 6630 nanometers and also aged 50 nanometers. People don't need to worry too much about that at all.

So that's an aspect of that. I just very powerful frequencies of light. Now, those frequencies of light can be shown in various peer reviewed studies.

Quite a few. The gold standard double blind placebo used to help boost energy production at ascending the level. Now what that does in basic terms is it helps repair and restore certain inefficiencies at a cellular level.

So for instance, you have the red light facemasks that people would have seen. It would look like Hannibal Lecter

wearing them. So really stranded at the moment because they they boost collagen in the skin at a cellular level.

They help. They do that by boosting fibroblast production, which can then lead to then the collagen elastin production. On another level, you have the near infrared light, which penetrates deep into the muscles and bones, which helps you recover faster, helps you.

If you've got stiff 18 joints, it's also been shown red light to to be smooth as well, so it doesn't like deep sleep or it relaxes you. It suits you very similar to the sauna, but it does so more of that sort of cellular level where it helps you relax, unwind.

It's great to do in the evening and you've got a surge sort of red light that you can use as well, which is lighting. So you can actually change the light bulbs in your house to admit only red light in the evening, which mimics the campfire, which can help you relax as well.

The reason people are doing that right now is there's been one study that came out in 2018 that showed that blue light can impact best skin, regardless if you're wearing blue light glasses.

So people are starting to change their light bulbs out. We use lamps or red light motion sensor, night lights, things like that, because the red light has been shown not to impact melatonin production, which then could damage your sleep.

So there's sort of three ways you can do it for a red light and so on as it's great, makes you feel amazing. Red light therapy near infrared and red light at it's therapeutic levels, which can help you feel relaxed and amazing but also help boost cellular repair.

And then you've got red light lighting like light bulbs and light, which can be used around you to stop the blue light from hitting your skin and disrupting your sleep and hormones in the evenings.

And that's fantastic. Thank you for explaining that so, so well to easily so like Amazon app. Actually as I said, it's a it's the infrared but it's also got the red light therapy in it.

So it's great. So I can get to 2 in 1 which is really. And you feel you really feel amazing and it really makes a difference with your skin. I can check and you do your mood and everything.

It's really great. And also I found if I use it like a certain amount of time in the morning, I'm very energetic. But if I use it for too long I get sleepy.

So that's why the slightly longer in the evening or something like that. So I love it. It does show it, but we could take those natural things and we can use them.

If you don't have a sauna, you those are available to doing what a sauna is doing. But you can get a sauna blanket, you get fairly inexpensive sauna that you can actually that you can lie on the floor and climb into them and whatever.

So what can we do if we feel conventional medicine is not meeting our needs? So this is a bit of a jump to different side of things. How do you how would you approach that?

Yeah, absolutely. And it's a really, really good question. And the reason that's a really good question is a lot of people turn to the wrong people. Then if the conventional medicine isn't helping them, there's a lot of people out there that so because on one thing, right, that like sacredness that someone says you have to eat this diet to feel amazing.

And so, you know, I would say not to be vegan, paleo, keto, carnivore, whatever. Yeah. The worst thing you can do, you've got to go to someone that's that's really looking at both sides of the spectrum, both sides of, well, this study saying one thing, this study saying the other.

Let's find where where we can sort of have those discussions and find out what can work for people on an individual level. I think you do it really well, Karen, because you talk about lots of different protocols that people can use, whereas going, you need to do this and, and you know, where you go now.

It's kind of the, the philosophy we have as well. We know that light is one pillar of health. It you know, a lot of people would sit here and go, right, like cycles of anxiety and depression, doping to don't need to do anything else and make mistakes.

Just big mistake. Massive mistake. One tiny pillars the you know, might cause it or might intensify it or might have no impact for some. You just got to look at all the different protocols.

You've got to think, well, how can this work for me? Listen to your body, how I'm like feeling if I try something that, you know, vegan is saying, eat a vegan diet and you're eating it and feeling terrible, that's not for you.

And that's not a mistake. You're trying different things. You're experimenting on yourself, you're trying to optimize yourself, and you've just got to try different things to find what's wrong for you, not what someone is telling you is right to you.

And I think that's probably the the bit of advice I would give people. That's really great. Now that's such I totally agree with you 100%. What are you what are some other lifestyle choices?

We can make improvements and physical health. Because if you think of it, you've just said, you know, this lights one pillar and this one is one pillar in the infrared.

They've read moss, another pillar it all of these things are adding up.

Balanced Biohacking and Product Recommendations

And you also can't do everything. I mean, the whole biohacking movement is fantastic and I know you're very excited about it. And you know, we all are.

But you can, as you already gave, for example, sleep tracking you. You can't. It's counterproductive. If you're waking up to check your sleep, go. It can make you very stressed out.

I mean, I've had people saying this to me recently at various different conferences saying, gosh, I put every tracking device out there and it's just made me a basket case because it's just tracking everything.

And that's also not good. So we're not telling everyone to do everything. It's to get a nice broad knowledge base and then work out what works for you.

So in terms of lifestyle advice, how would you. And as our last question, how would you advise people to include a enlightened and and sort of is an and just generally, you know, how would you get a balanced approach, life set, lifestyle choices and what other lifestyle options would you recommend to on top of what you've already recommended?

Yeah, absolutely. Great question. It's it's a spectrum, right. Biohacking and and anything in health you've got a really extreme deep one end and you've got people that know nothing at the other end.

And yeah, anywhere along there is fine to be. What you don't want to do is go right. I'm going to go and buy 20g worth of biohacking tech from day one, having, you know, listening to to someone talk about all this stuff because you're setting yourself up to fail to have small habits.

It's all about starting with the freestyle. Get outside more, get out into the light mold. You then might go, oh my goodness, I feel amazing doing that.

Maybe I've been to look at managing my like hygiene in the age. Like maybe on I'm going to have a couple of solar and maybe I'm going to try some blue light blocking glasses.

You might start to feel great after that and say, you know, that's enough in the, sign. But some people then make it going, no, I'm going to go one step further.

I'm loving this. I'm going to try sauna blankets, I'm going to try red light therapy. And it snowballs from there. And no matter where you are on the spectrum of biohacking, it's totally fine.

Everyone's on their own journeys. Some are more far along than others, but there's no shame in being anywhere on their own, and there's no shame in stopping anywhere on that.

You know, I I'm probably sort of a nine out of ten on that. My wife's probably a six out of ten on, on that spectrum because it works for her to stop at that point.

She doesn't need to do those other things. It's really, again, go back to listening to yes yourself and what what is good for you, because otherwise you know, you.

It's all about anything in health, wellness, anything, anything in large number ones and the adherence to it. Right. You can call any diet world that it's at, what's going on, what's the use and what are you going to stick with it to make your life healthier and more fulfilling?

And I think that's where you've got to got a position now. I think it's as simple as that. I love it. I totally agree 100%. Thank you Andy. What about we can people.

What what did some of you tell us? First of all, what are some of the other products that you have that you could add that can help people in the search for their lifestyle changes?

And I know that, you know, trying to tell them to get everything, but let them know what you got available. And then we can they get hold of you. We can learn from you.

Absolutely. Yeah. I mean, we offer the full suite of biohacking products. They will be tested. They're all doing what they say they're doing, which is which is important because there's a lot of not so good ones on Amazon out there.

Absolutely. Yeah. It could have been Buttery Castle better. If people are just listening to audio of this, that's fine. But I did have a couple here just to show that.

He's. Got this. Yeah, these are my like sensitivity glasses. So then like boosting glasses they have during the winter months for me because winter here in Australia, they make everything really yellow gray and make me happy. So I love to wear these.

I've got a family history of Seasonal affective disorder. So I am really staunch biohacker in the in the winter. So now it's all yeah. And then we got these glasses here.

These are blue light blocking glasses. Now as I said earlier in the evenings you want to block blue light because if you don't you're going to potentially not sleep because as well.

And and so really and so these helps reduce cortisol and increase the melatonin production. These are cool. These are so good. These are motion sensor night lights.

So I have them positioned around the house. So as I'm walking throughout the night they come on and they emit red light. I love. Them. Yeah. So not so soothing. And I got a lab.

That. Is in London just to show them finally, which is red light therapy. Wonderful. Beautiful little baby panel that we have says, you know, you can just pop it on your desk and just have it, just say so.

Good. Yeah, sometimes I have it just just here, like, next to my computer. And developers as have a good balance the light. But also how great with skin health.

How do we go about this? Like that's fantastic. So people can find us in bomb charge.com to be on and in charge as in yeah at the word charge. So bon charge.com and yeah like we've got amazing people like in our customer support team as well.

Some people have any questions like it can be overwhelming going on a website. Yeah. What was it so far. So Clapton. Yeah just just say like this is my situation.

Say that I heard the conversation that we've been having and can they provide some advice on what products they should start with then? You know, everyone's trying that.

But in a sense, they all know what these products do. And I and say, well, based on what you've described and your lifestyle, maybe try the blue light glasses, maybe try the nightlight to start with and then they can go from there.

But yeah, they're not allowing. We're here to help get education fast. Got some cool blogs on the website, and an amazing support team to be able to help personalize a product or anyone that needs that help.

Oh thank you so much Andy. That's amazing. Well, thank you for your help and thank you for the work that you're doing and the we are making. All these things are just giving us a really balanced approach to a field that is, you know, sort of an area that is exciting, but it's got a little bit overboard sometimes to be a whole biohacking movement.

So thank you for bringing a nice balance back to that. And thanks for joining us today. You're most welcome. Thank you so much for having me on. And it's been a pleasure to to state that light today.

Fantastic. Always good seeing you. Thanks, Andy.