

## HACKING EYESIGHT – INTERVENTIONS WITH DAVE – MARK BELL – #895

Dave Asprey:

You're listening to the Human Upgrade with Dave Asprey, formerly ...Bulletproof Radio.

Dave:

This special edition of the Human Upgrade podcast is about teaching you how to think about hacking your own biology. And in this new series, I'm working with individual members of the Upgrade Collective, which is my membership and mentorship group that you can join. And I do these episodes because I want you to learn how to solve your own health problems. All of these, I'm solving someone's own health problem by helping them learn how to think the kind of questions they might want to take to their doctor, the kind of interventions they might want to do themselves that are nonmedical, like nutrition or changes in sleep or something like that. And this is about setting you free to just say, "Oh, I know how to handle that. I knew where to go, I know what to ask, I know what kind of professional I want to work with or I just know what to do. Thank you for tuning on this episode. Interventions with Dave. Enjoy.

Dave:

Today is an intervention with Mark Bell. Mark came up to my place quite a while ago, and was on the show. He is a world record breaking power lifter. He owns Super Training Gym, the strongest gym in the West, invented the slingshot, which is the thing you put around your arms to help lifters lift more without getting injured. And well, he also runs Mark Bell's Power Project podcast. He did all this because, well, a bully was mean to him after punting his New York Jets football into the woods and said, "I'm going to be so strong that I can actually punt the bully into the woods." And apparently, you can do it.

Dave:

1,080-pound squat, 854-pound bench press and 766 pound deadlift. And when he was here up at my house, I'd bench press him just to show him who is boss. Okay, maybe that didn't happen. But it was really fun to see you on some of the gear from Upgrade Labs. Because I mean, you were pushing some numbers that didn't make any sense. It's like a video game with the numbers wrapped around or an odometer. They wrap around back to zero. So, you kind of do that with power. So, what's going on with you, man? What are we going to hack today?

Mark:

I didn't know this was an intervention, man, I'm out of here. It sounds pretty intimidating. I think a lot of people have experienced this, especially in their 40s, when all of a sudden shit doesn't work the same way as it used to. So, for me, it's my eyeballs. And I just I don't really recall seeing anything like out of focus at any particular point. I don't remember being like, "Oh, I think my eyes are going." I just woke up one day and it seemed like they were gone. And they progressively gotten a little bit worse, probably because of the interventions that I'm currently using, because they're probably not great.

Mark:

Like wearing readers and things like that probably are making the problem a little bit worse. So yeah, I've had some issues with my eyes. I've tried to do some stuff, like, not look at the sun necessarily, but view the sunrise in the morning and some things like that, that I heard could potentially help. I also took

some vitamin blend that's supposed to kind of help your vision but I didn't notice much from that. Maybe I haven't been taking it long enough or something like that. But yeah, so I would like to be able to see the way that I used to be able to see.

Dave:

I see. So, did their [inaudible 00:03:47] time.

Mark:

[inaudible 00:03:48]

Dave:

So, you have symptoms that's really common. You're becoming nearsighted, or sorry, farsighted as you age. I said it backwards, of course. And you can hack this pretty effectively. There are some things going on. One of them, are you ready for this? Muscle weakness. Now, those are words you're not used to hearing, right?

Mark:

Right.

Dave:

So, there are muscles in your eye that control this and as you know as a powerlifter, can you put your ankles behind your head?

Mark:

Nope.

Dave:

Nope. As it, can you touch your toes?

Mark:

I can, yeah.

Dave:

Is it hard?

Mark:

It's not easy. Yeah.

Dave:

Okay, there you go. So, you're very strong, but you might not have as much flexibility, as say, a yoga teacher, right?

Mark:

Absolutely.

Dave:

And these are the two sides of a coin. There's strength and there's flexibility. And as you age, your eyes, the muscles lose strength. The tissues lose flexibility and this has to do with collagen types and cross linking of collagen. You're actually see yellowing of parts of the lens in your eye. And then, there's also a neurological thing where the brain may not actually be connecting. And you've probably seen this in some of your lifts, right? There's some kind of a connection between the thoughts, and then actually doing it. And there's a willpower in manifesting and all that kind of stuff, the spiritual side of sports. But there's also a neurological side where, because the body doesn't fully tell the muscle [inaudible 00:05:27] because the muscle is afraid of being injured and the body believe the muscle, right?

Dave:

So, there could be some of that neurological stuff where the signal is not getting through, and that can be a wiring problem or it can be a problem in the eye itself saying, "I don't want to do that." I don't think that's usually the problem in eyes, but [inaudible 00:05:43] on the data on that last point. But I do know that tissue stiffening and activation and training of the muscles, so you have fine grained control are really important. And you're right at the age where this happens to a lot of people. And I'm going to humblebrag for a minute here, not to tell you, "Hey, everybody, look at me." But just as an example of what's possible.

Dave:

I was about 20, gee, I don't know. Way back in 1997, I had LASIK, which was a bad idea. It did get me to 20/15 for a while and I was pretty bad before that. I don't know. I got glasses in seventh grade kind of thing. And you could say, "Yeah, but Dave, you're nearsighted. You could always see small print." But I'm going to get to that with you in a minute. And after, oh, geez, a good 13, 14 years after the surgery, I wasn't 20/15 anymore. I was more like 20/60 or 20/80, and I developed astigmatism. And I went in, and I did heavy duty vision training exercises once a week. The same stuff you would do in your strongest gym in the West Super Training gym, but I did it from my eyes. Okay, it was actually harder than going to the gym, because your brain doesn't want to do it.

Dave:

Some of the exercises, were for fine-grained near-sighted control. Some of the exercises were for distance focus. So, you can see an athlete, say a gymnast, how they walk on a, what do you call, it's a balance beam, right? They're doing all this stuff well. It's fine-grained neurological control. In fact, it's the same thing that when women walk in 19-inch heels or whatever they do. I don't know how they don't fall over, but it's because they practice, right? So, have you learned to walk in heels yet?

Mark:

I've been working on it.

Dave:

See? I can actually say things like that to the world's strongest power lifter, because you're not in the same room with me and you won't pull me into a pretzel. So, I'm kind of baiting a bull who can't charge me. So, I just mess with you. But you know what I mean? How could you possibly dance in heels or be elegant? Well, it's a learnable skill, that is my point. Okay. So, we want your eyeballs, more specifically, the muscles in your eyes and the connection between the brain and the muscles to be able to walk in high heels or walk on a balance beam or do something that's nimble and flexible and highly, highly

precise. And it's that precision training. That's cool, right? I mean, you grab a dumbbell and you're going to just bring it up or do you bring it up really slowly without a wobble? They're just different skills, right? That's a part of this.

Dave:

So, let's address first what happened with my training and that I'll tell you some of the exercises I did. And then we're going to address supporting the tissue stiffening and the energetics of it. And then, we'll talk about some hacks after that, that might possibly work for you. Is that a good deal?

Mark:

Sounds great.

Dave:

Okay, and I want to call out here. I'm not a doctor. I have no license. I am unlicensed biohacker. And this isn't a medical call, as you've probably already heard. This is a training call, just like you're not a medical doctor, but you help people get stronger and recover from whatever's going on with their shoulder, right? So, definitely not a doctor sort of thing. If I talk about medical stuff, it's go see the right doctor who can help you out with this.

Dave:

So, I did three months, an hour a week of just crazy, annoying, exhausting eye exercises that are also kind of like brain training. At the end of this, I went from that 20/16 with astigmatism back to 20/15 in both eyes and the ability to read the very finest print a teenager can read, and I still have that today. Okay, what the heck? Okay. I am. Let's see, 48. So, a bit older than you. The last time I went is probably three years ago, pre-pandemic, maybe four to one of those crazy eye specialist types, a little bit of a functional vibe. And she looked and she said I've never seen anything like this. You haven't lost any flexibility in your eyes the way you're supposed to as you age, and you're still 20/15, you can read the finest print. Keep doing what you're doing. I haven't seen this before. But I think it's a combination of your glasses, the TrueDark glasses, and the supplements you take and the things you eat.

Dave:

So, I have those data points that I am able to read the finest, finest, finest print. And it's a question of lots of lifestyle things. I'm going to walk you through everything I did. But the first thing, let's get through the training side of things. There are people including eye doctors who may hear this and be offended who have learned you cannot train the eye. It's not possible. In fact, if you go to Wikipedia, which is pretty much owned at this point by Snopes, not that it's a nonprofit foundation, it's not actually run by them. But there's a very strong anti-functional medicine vibe amongst the 2000 or so people who run the content on Wikipedia. It is not a democracy at all. It is pretty much influenced by big pharma at this point. So, they tell you lots of stuff aren't possible on Wikipedia and they're just not even truthful at this point. So, I don't consider them to be a good source of information on this.

Dave:

When you look at the history of eye training, there's a guy named Bates who figured this out. And if you look up Bates eye training, you'll find all kinds of stuff online about it. And I first became aware this was possible, Mark, because Meir Schneider, who wrote a book called Yoga for Your Eyes, which I want you to buy and read, I actually had the honor of hosting at the nonprofit anti-aging group that I used to run

in Palo Alto and he came and gave a talk. This is a guy who had 200 surgeries on his eyes before he was [inaudible 00:11:46] very young age. He should be legally blind, because his cornea is like a shattered mirror. Yet, he reprogrammed his brain. He has a driver's license, he can see just fine.

Dave:

So, what's going on here is the brain can change what comes in through the eyes, so you can still see it. And he has a set of exercises in the book that are incredibly annoying, because they're more like yoga exercises. Part of this is rest periods for your eyes. When you lift really heavy one day, do you take the next day off?

Mark:

Sometimes, yeah.

Dave:

Okay. Sometimes. I mean, at your level, you probably don't have to take the next day off because you've gotten tissues that are used to doing that. But most people who lift heavy at your gym, if they lift heavy every single day for a week, they don't make the progress they would have if they skipped every other day?

Mark:

Absolutely. You need days off.

Dave:

Yeah, there you go. When was the last time your eyes had a day off?

Mark:

Good point.

Dave:

Okay, so there are little muscles and things like that. And one of the things that Meir Schneider and the base method use is something you can actually do right now. And you put your hands together and you rub them until they get hot. And that's in 20, 30 seconds. I'm doing it right now against a microphone, so all you ASMR people can enjoy it. And then you cup them over your eyes, which means you don't push on the eyeball, you're creating like a hollow space. Now, anyone who does Qi Gong or Dr. Barry Morguelan's Energy for Success exercises, or Ni Gong, or any of the other...

Mark:

Are my eyes open or closed right now?

Dave:

You can do either one, whatever is more comfortable for you, right? And what I would be doing in person is sticking googly eyes on your hand, so you look really funny. No. And you do that for about 20, 30 seconds, and you breathe deeply and just relax. And what's going on is there is a bunch of stress in your eyes, there's unconscious stress, it's there. And your eyes are not really individual organs from one perspective, they're actually an extension of your brain. They're plugged right into it. And there's a lot of

neurological tissue in there, so there comes specialized parts of the brain, if you want to think of it that way. So, when the eyes chill, the brain chills. And I say this with great knowledge because I happen to own a glasses company and a neuroscience company and I've done studies on that, that we're in the process of publishing. So, take another couple of deep breaths and then open your eyes and let's see if you feel different. How's your brain feeling? How do your eyes feel? Is there any difference?

Mark:

It took a second for my eyes to kind of recalibrate to the room.

Dave:

Yep.

Mark:

But yep, all good.

Dave:

Okay. And what I did when I was recovering from whatever happened to my kind of drifting off the path after that surgery I had many years ago. By the way, have you had any vision correction surgery? That's an important question.

Mark:

No, I have not.

Dave:

Okay, good for you because that severs nerves in the eyes and causes dry eyes and all sorts of stuff people don't know about. So that's a part of it. And I would do this every hour for like a year, at the end of a meeting or something and before I start the next one. I would just take a minute to do that. The other thing that I learned to do, when I was doing this, I was working at Trinity Ventures, a venture capital firm on Sand Hill Road. And they put all the entrepreneur and residents guys like me into this little fishbowl horrible room on the inside with no windows and bad LED lighting. And then I bought my first Mac, I found the switch from Windows. And they have very bright lights in the back of them. And so, I was like, "Man, I'm feeling so tired." And it's because my entire visual field was four feet away from me, the walls of this little room where me and a couple other guys were. And then I look at a super bright light, and then bad lighting, bright light, bad lighting.

Dave:

So, what I learned from my vision training exercises was I'd go outside whenever I could and I would just stare as far away as I could. And there's a reason right now where I'm sitting, I am looking at you, I have one screen that's about three feet away from me, which is my Mac screen. So as far away as is reasonable for me to still be able to see it and one screen that's five feet away from you, five feet, it's a 55-inch HDTV. Because what I'm doing when I'm communicating all day long is I'm looking far away, not just up close, what you're doing at a laptop, usually.

Dave:

So, this is important, I'm changing my visual depth of field throughout the day. I also have, and this is for a different reason, I have a mirror that's about 18 inches from my face right here. That way I can tell whether my Zoom filtered version of my healthy face, which I'm not using right now because we're not even using Zoom, but whether that's real or the thing here. So, I'm looking here, I'm looking here, I'm looking here, and then I turn to my right and I look two miles away. Okay, so variable depth of field. Okay. Now, you know gyms, you know exercise, right? So, range of motion. This is your thing.

Mark:

All right.

Dave:

So, if you only did half of the bench press, you're probably not very successful, right? You got to have strength throughout the whole range. You've limited your eyes to a relatively narrow range. And while you're at it, you fed them junk light, which is pretty much junk food. So, I know I sent you a pair of TrueDark glasses. Probably that was the daytime ones, I sent you, the yellow ones?

Mark:

Right. Yep.

Dave:

Okay.

Mark:

I have a pair of red ones, too.

Dave:

You got the red ones, good. The red ones are really powerful at night. And there's actually a study somewhere of using, and the red ones, they are patented lens. It's not just red lenses, where it's filtering out four different colors and some other variables of light that make things hard to do. So, what I would suggest in the study I've found was reading under a red light or probably wearing red lenses increased eye strength and helped specifically with the problem you have. And I don't have the name of the study. But I can tell you that there's a reason that, it's probably TrueLight product, TrueLight, TrueDark makes little things like this, little reading light. It's like a red rechargeable thing. And I don't even know what its name is off the top of my head. But I use that kind of stuff.

Dave:

And so, at night, my lights are red and very dim. And this is part of fixing the problem. They're just getting overstimulated. I am predicting a huge wave of macular degeneration looking at bright LED lights from our ceiling and LED light to their screens without depth of field, it's a disaster. So, when I look at screens, they're either dimmed and I'm running the night mode. So, it's all as dark as I can make it. We're meant to see stars on a black sky. We're not meant to see black dots on a bright white sky. Our eyes don't do that. It's very stressful for us. And so, I changed my screen that way. And then I put on the evening mode, even when it's not evening. So, there's a yellow tinge and I turn the brightness down as much as I can. And this reduces the load on the eyes a lot, which is going to make them last longer, especially around this problem with stiffening of tissues.

Dave:

So, stiffening of tissues is going to be affected by your collagen intake. You need to have enough collagen so you can rebuild things. It's going to be affected by blood sugar levels, a lot of bodybuilders but not so much power lifters like, "Yeah, I'm going to spike my insulin and my glucose as much as I can after my lift because they call it insulin growth factor for a reason. And some of those guys are ending up as type one or type two diabetics later in life because of these incredible spikes. Well, they also create something called advanced glycation end products, which is cross linking of proteins including collagens. You don't want that in your eyes. You don't want that anywhere in your body. So, maintaining normal blood sugar would be good. Do you have blood sugar problems?

Mark:

No, not that I'm aware of. I've been on a low carb style diet for a long time.

Dave:

Are you keto for long periods of time without eating any carbs?

Mark:

No. I mix in fruit and vegetables and things like that.

Dave:

Okay, good. I think being especially with the output for your body, a lower carb diet is great. A zero-carb diet might not be really good from an autoimmune perspective. It would poke holes in your gut if you have it for too long and lots of other reasons, that's why I recommend cycling on the Bulletproof Diet, who would have ever imagined? And not cycling your cheesecake and burritos from Taco Bell either. So, you're not eating a lot of sugar, so you shouldn't have glycation products. The other thing that can affect people's eyes, but I don't think is affecting yours is if you're having mitochondrial issues, kind of brownouts. Or you have toxins, which might be an issue for you. Because you said it kind of fell off a cliff, right?

Mark:

Yeah.

Dave:

You texted me and said, "I can't see. What that just happened?" This was over the course of a week or over the course of two months, or what?

Mark:

I just kind of recognized it one day, and then I was like, "Huh, that's strange." And then the next thing, I'm wearing readers like I'm 60 years old.

Dave:

Got it. So quite often, if you get exposed to a neurotoxin, your vision changes. There's something called the visual contrast sensitivity test, which you can get at certain eye doctors. And it measures, can you see the difference between these 64 shades of gray? And if your nervous system is dialed in, you can see it. And if it's not dialed in, you can't see it, and they all look the same to you or you don't see any gray at

all. And it's totally invisible to your conscious mind. But when you say, "A versus B, oh, what the heck." So, this is used to diagnose environmental toxins.

Dave:

And I have seen people including me, I do something wrong biologically. The next day, I'm not 20/15. One eye or both eyes may be blurry. And then, I've even had times where "Wow, that fine print is off. That's weird." But it gets better when you remove toxins and you increase mitochondrial function. So, some of this may be that. So, when you had this sudden appearance of nearsightedness, did you move into a new house? Was there any environmental change that would have changed the toxic load on your body?

Mark:

Not that I'm aware of. I'm trying to line it up when it happened. Yeah, nothing that I'm conscious of.

Dave:

Okay. Do you practice dimming your lights at night?

Mark:

I have been, for maybe the last couple months, so I haven't been [crosstalk 00:22:45].

Dave:

So, it's a new practice for you.

Mark:

Yeah.

Dave:

I'm seeing more and more problems with just, I overuse it. Your eyes are not meant to see bright lights at night. It's like candles, fireplace, or fireflies, and stars and the moon once a month. That's the entire history of our species until recently. So, dimming those lights, it takes time. Replacing crappy lights is a good thing. And you're in your podcast studio, right?

Mark:

Right.

Dave:

What's shining on you right now to make you look so beautiful?

Mark:

Yeah, we got some pretty bright lights shining on me right now.

Dave:

And they're LED lights, right?

Mark:

I believe so.

Dave:

Yeah. So, they're kind of flat panels, kind of bright, harsh light?

Mark:

Mm-hmm (affirmative).

Dave:

How much time do you spend under those lights every week?

Mark:

Quite a bit.

Dave:

Okay. You wonder why your eyes are having problems? Okay. Very bright, pinpoint sources like those, they actually cause skin aging in addition to eye aging. So, there's people who I actually support who'll say, "Wear sunscreen indoors or long sleeves to avoid tissue aging from harsh LED lights, especially studio lights." Now, sunscreen is generally not good for you because of its hormone disruptors and all that. So, this is mineral type of sunscreen that isn't the harmful stuff I'm talking about or maybe PABA, it's a B vitamin-based stuff.

Dave:

So, what I'm doing that's different than you is I have 120 watt halogen over there and 120 watt halogen over there. In front of them is a diffuser screen. So basically, my eyes are seeing two sun-shaped orbs about this big. Oh, they call it diffuser screen from Amazon for some amount of money, at least put that in front your LEDs, but your life will change if you just get halogen. Yeah, they're hotter and they use more power and you need to change the bulb every now and then, who cares? It's \$100 lamp. But halogen makes a huge difference because it's warm and because there's infrared light in it.

Dave:

The other thing you can do to chill your eyes out a bit. Having a red LED light on somewhere makes a really big difference for you, even if it's just behind your monitor. So, you're just changing the ratio of this bright stuff. The eyes are expecting the rainbow of spectrum and heat to come from light. There should always be, if you go outdoors in the sun, there's heat and light together. When you get light without heat, the eyes actually don't turn on some of the healing stuff they should do. But I don't think you're going to turn on that radiant heater. I certainly don't do that. But if you look behind me, there, see that red light that just came on behind me?

Mark:

Yep.

Dave:

At night, those things are on and I have something similar behind my monitor, so that there's just a little bit of a red glow. Okay. "Dave, you're the biggest nerd ever." Look, you're on a low carb diet, right? It's because too many carbs do bad things to you.

Mark:

Absolutely.

Dave:

I'm suggesting you need to change the ratio of red light to blue light and infrared light in your life the same way you did with your food. And then, when you do that, it's going to create long term advantage for you. Okay, it's not as crazy as it sounds when you look at it through that lens, right?

Mark:

Right.

Dave:

Okay, the next thing I want to do is go back to that training I did, the stuff I learned from Meir Schneider. We talked about that resting of your eyes, they call that eye cupping. And guys, you can Google Bates method, you can look at Meir Schneider's book, M-E-I-E-R S-C-H-N-E-I-R, one of the more inspiring books ever. You'll realize what this guy went through to retrain his brain, it's nuts. And it is tiring to do brain training. I have 40 years of Zen that does that. But training your eyes is just as tiring.

Dave:

So, I brought something for you. This is actually left over from my eye training years ago. I would refer you guys, but the guy that did that is not there anymore, they don't do that. So, what I have, and a functional eye doctor or someone who does neurological eye training or a developmental ophthalmologist can do this, can you see these little letters?

Mark:

I cannot.

Dave:

Well, that's because you have eye vision problems.

Mark:

That's right.

Dave:

It might be a camera issue. It's just a grid you would use for searching out a word finding game that you'd find, but they're pretty darn small. And I have a smaller one and a bigger one. So, what you do with the far-sighted training, this is to train your up close vision, you have these really, really awesome little things. They're lenses that have different levels of focus, kind of like readers. But if you wear readers all the time or corrective lenses all the time, your eyes get weaker and weaker by design.

Dave:

Now, every eye doctor who recommends glasses, "How dare you say this Dave? Don't you know?" Guys, I have some information that you may not have. And yes, I wore glasses for the first whatever 20, for at least 15, 17 years of my life, I haven't needed them ever since. And I know dozens of other people who've been able to train their eyes. So, you can say it's impossible. I have evidence that it's possible. One of us is right and one of us probably is wearing glasses. So, there you go, right?

Dave:

And this doesn't mean everyone can do it. And I'm not saying you shouldn't wear glasses. I'm just saying that if you put on progressively stronger readers, you do what most people do, "Oh, I'm just going to walk with a crutch all the time." And well, eventually you kind of need the crutch and then you get a walker, and then you get a wheelchair and it's a progressive decline. But if you're injured, you need a crutch for a while and that's okay. So, what you do with these things is you look at the finest one you can see and then you have the correct one, then you turn it over, which makes your eyes go in, out, in, out, in, out and you get really tired and probably yell at people around you because your brain is really hating life.

Dave:

Okay, before that training, not having toxins and having stuff that increases your mitochondrial function, [inaudible 00:28:12] MCT oils, some coffee, and all the other stuff you might do, even doing breathing exercises, maybe some Wim Hof, whatever you like. And this is going to charge you up. But you can actually do this, and you can order these kinds of lens things online, but honestly, find a developmental ophthalmologist or a neurological ophthalmologist. Call him up, say, "Can you train my eyes?"

Dave:

And you actually do the same amount of effort you put into getting arms as big as tree trunks, you put it into having eyes that can be flexible like that. And that's a big part of this, it's like you've been training so much of your body for so long that these guys haven't been trained and you've increased the load on them a lot without any recovery time because of the shift in your studio lighting. And okay, without studio lighting, we have a history of people who need readers but not as early as you. So, you have early onset. Okay, so that's, I'm putting my cool toys away.

Mark:

With the, I guess the red TrueDark and the yellow TrueDark glasses, I think the ones I have, I think the red ones are normal. I don't think they're magnified at all.

Dave:

No, they're not.

Mark:

It's hard for me to really see anything with that on, so how can I, I just usually wear them for a little bit. I used to just go to bed because I'm like, I can't look at my phone, which I think is a good healthy practice anyway.

Dave:

So, when I read at night, whether it's a screen or even a piece of paper, I have dimmed it as much as I can and I put on the glasses. So, my night vision is better than yours. I also have a huge supplement advantage. So, here's what I'm doing supplement wise. There are great studies on bilberry, astaxanthin, and lutein, as well as ZeaLutein and a bunch of other things like that. I don't know what formula you took, but it's not going to give you huge changes overnight except with night vision and seeing through red or seeing during red light is similar to night vision. Actually, when you have red lights, even my exterior lighting on my house is all red. So, I walk outside, I can see the Milky Way. And that's partly because I live on an island pretty far North, so there isn't light pollution. But it's also because my eyes don't get killed by my porch light, right? Also that no bugs come to it.

Dave:

But what I do is I take five, which is a lot of the Eye Armor formula that I put together when I worked with Bulletproof and it has an absurd amount of astaxanthin in it. And I'm not recommending anyone do what I do, but I'm just sharing my practice of taking these things. You and me, both Mark are big guys. What do you weigh?

Mark:

I'm 230.

Dave:

Okay, we actually weigh exactly the same amount, but you're like a foot shorter than me, right?

Mark:

Something like that. Yeah, I think [inaudible 00:31:15], yeah.

Dave:

What are you like? I'm 6'4. So, you're probably 5'9 or something. I don't see remember. I don't see height at all, because everyone's about the same height to me.

Mark:

I'm 5'11, something like that.

Dave:

So, you're actually like just about the perfect six feet taller.

Mark:

[crosstalk 00:31:29] feel taller, but [inaudible 00:31:31].

Dave:

You're denser than me, we'll put it that way, in a good way. So, we're the same body weight, so, it's approximately the same amount. But most of the vision supplements out there, we are balancing. Look, are people really going to buy this if I put as much as I want to put in there? Versus I'm going to have enough that there's clinical results to do this. I know it's going to help people. And it's not the case with all supplements that more is better. You can overdo zinc and copper and minerals and B vitamins and stuff like that. So, I don't want to tell you guys go out there. But there are some really good arguments

that having large, large amounts of astaxanthin are good for you. And bilberry, we know helps pilots from World War Two, they figured it out that you can see better at night.

Dave:

So, I think you want to do those because night vision means you can read under those red things and it's going to help your eye strength. And I'm so grateful that I can go to the store, I can pick up the bottle of supplements and they've got kind of a great text on a green background in super fine print, and I can read it. I don't need glasses. But there are some days where, "My vision is a little bit blurry today." And then, I sit there and I do some exercises and I have learned to consciously focus [inaudible 00:32:43], cover one eye and make the other eye like go in and out. I didn't have that skill before I trained it. And that usually clears things up. And if not, I take some charcoal and I get my toxins down, and funny enough, the next day I can see you again. So, your daily visual performance does vary.

Dave:

All right, you mentioned something at the beginning. Getting sunlight in your eyes in the morning. There are studies that show getting ultraviolet light into your eyes helps with vision, although the study that I'm aware of most says that it helps with nearsightedness. I don't know if it helps with farsightedness, which is what you're dealing with, but it probably would. And this isn't a huge amount. It's 20 minutes sunrise, maybe even sunset. The reason you're doing that is there's some circadian timing that's good for you that's why I recommend it normally. You don't need to stare right at the sun. In fact, a lot of people would tell you that's bad. I know a few sun gazers who swear it's good. It's generally safe to get some sun in your eyes in the morning without glasses, without contacts. I didn't ask, you're not wearing contacts or anything, right?

Mark:

No.

Dave:

Okay, good deal. So, what's going on there is that signal causes collagen synthesis, which is a really good thing you'd want to do. There's also something called Gabor patches, G-A-B-O-R. And these are weird images that stress your brain's visual perception area, that could help. So, you can just do some research on that one. I haven't used them, but I'm familiar with them. I would see some other stuff going on here. There are apps that train your eyes that probably work. There's one that I'm intrigued by. It's called Glasses Off, but actually, I don't use it because every time I turn it on, I installed it a couple of years ago. Every time I turn it on, it turns my screen brightness up to 500% and this phone is so bright I don't want to stare at the phone and see little tiny things. It's like, "Come on guys. If you're glass up, let me control my screen brightness, you jerks."

Dave:

So, I would do that training but I wouldn't want to stare at the brightest possible iPhone setting to try and train my eyes to do small detailed work, but I think that works. And now I'm going to get something else irritating to some people. Video games might be good for your eyes. That is, if you're playing a video game with very, very tiny things on your phone, whether it's one of the brain training games or just some little dumb arcade game, as long as it's got very tiny things moving around, and you have to distinguish between them. Well, the brain is very interested in video games, because it feels like it's you.

That's why they're so engaging. So, if you're getting a little dopamine hits every time you focus properly on a tiny little thing, so playing little arcade game on a screen can make a big difference.

Dave:

And there's dumb little ones like this. But like, here's one, it's called plasma, something. And it's a dumb little video game. But the point is tiny little dots moving around screen as dim as you can get, "Hey, brain. Now, here's something engaging to make your eyes do something." I think there's actually value for that. Right? But make sure this the screen is very dim when you do it. And no, no one's ever told me that, I don't have a study for that. I just know that if you get the brain to be really interested in something up close, it's going to learn how to see it. And what you're dealing with there is that's most of the story. The other one is omega six fats. What do you do around the type and composition of fats that you eat?

Mark:

I primarily eat like grass fed meat and eggs.

Dave:

It's like we've been hanging out.

Mark:

Yeah.

Dave:

Okay.

Mark:

Yeah, when I came up there, we talked quite a bit about what I've been doing, ketogenic diets since the mid 90s.

Dave:

They work.

Mark:

I've keen to this stuff and I've been on this stuff for a while. So, if there's some omega sixes in my diet, I think they're sliding in there, [crosstalk 00:36:47].

Dave:

Phenomenal. You're not cheating with nachos and whatever.

Mark:

Occasionally, I'll eat whatever. Yeah, occasionally, I'll have some pizza or some ice cream or something like that, but it's pretty rare.

Dave:

Even those I mean, the pizza, if it's from a normal place, they're probably using canola or soybean or corn oil on the crust. But you don't want to have much at all of that. It doesn't sound like you're having a high enough level for that to affect your vision. I think it does, especially eating fried things, the next day can have effects on vision, because fried food is more inflammatory than smoking a cigarette. I mean, people don't like to hear that [inaudible 00:37:24].

Dave:

But that whole thing about inflammation is what's behind it. And it doesn't tell you're doing anything bad there. The diet you're eating is around 1.6 to 2% Omega six fat. That's what you find in at least grass-fed beef and pasture raised non-vegan eggs are probably similar, they might have a little bit more. I don't want to just make it up. But they're still going to be mostly saturated in those egg yolks, and they'll probably be enough arachidonic acid and other things.

Dave:

So, I'm not going to worry about you there. I think it's mostly a polyphenol issue and astaxanthin, and lutein, and the other things like that. So, look at the vision formulas out there, but you might want to do several of them, if the ingredients in them are appropriate. You also have to remember because we're just about identical body weight. We're not 100-pound people. And there are lots of these teenage plant-based men or want to be men who are inhibiting testosterone and bone developments and things like that, who maybe are not going to be as large as you are, or as I am.

Dave:

But supplement manufacturers have to make a dose that is absolutely safe for the very low end. So, you can have you know, a 90 pound, 4"11 woman and okay, this is the recommended dose. I double dose almost everything. And in fact, I ordered two meals at restaurants because they're meant to satisfy 120 pound person and I'm like two of those, right? You probably do the same thing.

Mark:

Absolutely.

Dave:

With your supplements though. You need to double and maybe triple because you also have way more percentage of muscle than the average kind of spongy person. So, I think for anyone listening, if you're obese, you might need more detoxing stuff. And the recommendations in superhuman around calories, you kind of subtract most of your fat weight and then that's your calorie need. "Wait, Dave is talking about calories?" Well, I'm always talking about protein, not calories to be really clear. So that's your protein need. But you don't want to be eating extra, extra, extra calories. It's just that, that's not the biggest variable. So, for you, I think we're not going to worry about your diet because you're pretty good. Are you taking any fish oil?

Mark:

I do. Yep. I take, probably, I've been doing this for the last two months because I go on and off fish oil here and there and I've been taking, I think six of them twice a day.

Dave:

Six big pills?

Mark:

Yeah, yeah, six big capsules, yeah.

Dave:

You might be overdosing it. And was this after your eyes went off?

Mark:

Yeah, I've been doing, yeah. I have been doing this more recently.

Dave:

There's debate over the correct amount. In the 90s, the anti-aging group that I was running, "Oh, I'll just take three glugs and just drink it." But you can overdose on threes as well, and then they become pro inflammatory. But if you've only been doing it for two months, it's not going to be an issue. I'm happy with two or three grams a day. But if you're doing 10 grams a day, it might be beneficial, it might not, I think that there's great debate about it. We know it's good. Just because it's good, it doesn't mean more is better, which is the exact opposite of what I just said before, because while we're bigger, we need more. But it doesn't mean we need 10 times more, it only means we need like two times more.

Dave:

So, let's talk about one other thing that may be helpful, but I don't know for sure. You can do microcurrent TENS around your eyes. And TENS stand for transdermal electrical, what does N stand for? It's something anyway. The little thing is that you can buy for five bucks with little patches that make your muscles go squeak, squeak. Not like the electrical stim that you or I would use for physio or for putting on muscle. But those little things, there are devices meant specifically for macular degeneration that strengthen the acupuncture and acupressure points around the eyes. There's even a pair of glasses you can buy or it's more like a face mask that has electrodes built in. So you run this for 10 minutes a day to stimulate eye health. I would probably do that for a while and see if you get a difference because it's unlikely to hurt and it's probably going to help.

Dave:

Final thing is, you could look at doing red and infrared light therapy over closed eyes. So, you don't want to stare right into things, even the colored LEDs that can be beneficial for you. I think that there's evidence for doing that for generalized eye health. You'll see, for instance, at Upgrade Labs, we have a thing that's there for the face to be super healthy, so it helps you look better. It's one of the lights that TrueLight makes. So, it's been going on in my companies. It's not for the eyes specifically, it's for the face, for the skin, for collagen, but there is connective tissue and other synovial fluid in the eyes, and it's got infrared in it. So, is something like that going to be good for general eye health? Most likely, and I can tell you there are studies that have just generalized red light therapy for eyes and they say it's good. So, I would want to get more therapeutic red light and potentially infrared light on my face or on my eyes with my eyes closed.

Dave:

I'm just thinking, okay, the things I'm doing, I do sit there and I use that at least every couple of days on my face. So, my eyes are getting a dose of that as well. So, I'm trying to transmit to you, here's all the weird stuff that probably made a difference. And that's the difference in biohacking is that I wanted something to work. So, I did everything in my work. And then I start peeling off things to see, but then I'd never know for sure. And then in western medicine, where they're going to say, "Well, it must be just one thing." Therefore, I'm going to throw away everything and only test things one at a time. And these are the kinds of scientists who can't make bread. Because they baked the water, they bake the yeast, they bake the flour, there is no bread. So, you have to combine things. And you know this because you are a powerlifter. You don't do just one thing to become strong. It's dumb.

Mark:

What about a stem cell? Does anybody have advancements or anything like that for the eyeballs?

Dave:

Oh, let's get super, super nerdy on this one. Thank you for the reminder. There is a treatment that I've done with Harry Adelson and the team who works with Harry in Park City at Docere. They can do regular stem cells or they'll pull stem cells from your marrow or from other places, and the regulations change. So, I'm not sure what they're doing right now. But I helped Harry do the six-hands whole body stem cell makeover with Dr. Marcella Madera and Amy Killen. So, I had three doctors working on me. One doing joints, one doing cosmetic, and a cosmetic and reproductive, and then one doing neurological, which was Marcela. And there is part of that now is called V cells, which is a part of the stem cell universe, but they come from blood.

Dave:

So, there are also people who inject stem cells in your eyes, but that's usually for advanced macular degeneration. I don't think you need to do that anymore. But one of the techniques you can use particularly V cells is you can put them inside the nose where they go in very quickly, with regular stem cells too. But they go in, I have noticed stupid improvements in my vision from doing that. I think I haven't measured it formally. But I would guess, if normal people see 20/20, which means that you can see what the average person can see at 20 feet. And I'm normally 20/15, which means I can see the 20 feet, and you can see the 15 feet. But I had to be 28, you'd have to be eight feet away, I could see at 20 feet away. I had superhero vision for a couple days, the two times I did that. Literally, a mile away, I could see a speed trap, but just things that weren't normal and it lasted for a week or so afterwards.

Dave:

So, I think there's something to be said, and those were just intravenous. You can do intravenous cells that way. And Dr. Harry is definitely my go to guy for that, but he doesn't do eye treatments, specifically, but an intravenous thing is going to go to your eyes anyway. So, I would suggest IV stem cells, but after you've exhausted the other stuff. And if you're going to do stem cells, V cells are very hard to find these days. But that would probably be where I'd want to go for vision. Awesome, Mark. Well, was that a useful intervention for you? And you feel like you have a path forward?

Mark:

Yeah, absolutely. That was fantastic. I'm going to start to implement a lot of these things today, to get working on it, so I can see if I could see better.

Dave:

I think there's a great chance. And look, there may come a time in life, where you say, "I would like to have readers." And when that happens, you use the weakest ones you can and you make your eyes work. And if there's anyone on Earth who knows how to work hard at improving themselves, I think a world champion powerlifter qualifies, right? So, it's just a question of knowing that it's possible, and then knowing the right technique, and then knowing the right hacks so that you don't have to work as hard as you would otherwise. And the prime example there is the slingshot makes it easier to do a bench press. So, I don't know if you can say not working as hard, but at least you're doing it better than you would without it, so it's a tool that just improves things. I want you to have that for your eyes as well. And I kind of gave you the big download there. Well, thank you for sharing your work on your vision, and I want to hear what happens with it.

Mark:

Yeah, thank you so much. This is great information.

Dave:

All right. Thanks, Mark. Catch you later, man.

Mark:

All right, take care.

Dave:

If you'd like more content like this or you'd like to work with me directly, definitely join the Upgrade Collective, which is my membership and mentorship group that you can join. There are more than 200 videos including four courses where I teach you every one of my books because not everyone learns by reading. I'll get you discounts on tons of health and performance products that I actually use. You get to be in the live studio audience, interact with guests on the show, ask me questions, type things back and forth. And every week, there's community coaching calls, and every other week or thereabouts, I am on a call delivering new content and answering questions for you. So, this is a way to be part of a group of people really care a lot about upgrading themselves and upgrading humanity which is part of my core mission. Just go to [ourupgradecollective.com](http://ourupgradecollective.com) to join.