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**Bryce:** [00:00:00] About 43 percent of America is nearsighted. Nearsightedness is increasing at an alarming rate. It's estimated now that by 2050, 50 percent of the world will be nearsighted.

**Dave:** 20 minutes outside to get ultraviolet light in your eyes, deuces nearsightedness. You have a right to darkness. There's no reason that you need glasses, except that your eyes aren't trained, or you're not getting Enough sun and ultraviolet in your eyes.

I want you to teach the most important two exercises for improving your vision that people can do. What are they? You're listening to the human upgrade with Dave Asprey.

Today, this episode is recorded in person in Washington, DC. And I've just completed five really intense days of custom, we'll say co created high performance vision training. And if you've been listening for a long time, you know that I've interviewed a couple people about vision and you might've heard me talk about how [00:01:00] it's now 20 years ago.

I had already had LASIK. This was back, geez, in 1997 and it worked for about six years. And then my vision started drifting and I got to 2080. And I had astigmatism. It took me six months of working really hard with primitive vision training tools to get myself back to 2015 and get rid of the astigmatism.

And this held for 19 years. I noticed last year, probably from looking at my screen too much or something, a slight drift in my vision. I'm like, I don't like this. I'm planning to live to 180. I think you're on that journey with me, or at least 180. And being able to see, and see without glasses, without surgery, and without readers, is kind of a big deal.

And I've seen a lot of people when they hit 50, they get their readers and they go down that. For me in 7th grade I had glasses. I haven't had glasses in a long time. In this episode, [00:02:00] you're going to learn things about vision that you don't know exist. You can biohack your vision the same way that you might put on muscle or change your brain function or change almost any aspect of your biology.

And the thing about biohacking, wherever you start, you're going to end up with longevity and being more conscious and more happy because once you solve the short term problems, you're better off. Well, if your eyes work better, it saves an enormous amount of energy every day. Remember, you've got 30 pounds of air and some amount of food, and every day you breathe that much air, you combine it to make electricity and heat and hormones and proteins and all the other stuff your body does and willpower.

If you're taxing it by ineffectively using your vision, your brain will be tired at the end of the day. You also know if you've been listening, I started one of the first modern, uh, circadian biology companies, true [00:03:00] dark, and you see me wear my true dark glasses, which I probably have in my pocket right now.

And these lower visual strain by filtering out junk light. It's like the corn syrup of lighting. That's good for you. But what if you could train your eyes to use way less energy? So you had more energy for everything else in your life. Yes. You didn't. Get tired at the end of the day. You didn't get tired when you're driving at night and You can read without falling asleep These are major major issues and I've got dr.

Bryce Applebaum here who has co created this training program with me and we're gonna talk about what you can do for your vision and Like all the things I do There's always, here's what the crazy billionaires are doing, and I'll go do that. It's expensive, it's VIP, it's concierge, but it shows what's possible.

And the next step is, well, what can you do that's affordable? And then what can you do [00:04:00] that's free? So we're going to go through all three of those. My goal for you is that by the end of this, you recognize that you won't need to get a stronger prescription ever. That's the lowest hanging fruit. Thank you.

You probably might get a weaker prescription, or it's very possible that you'll throw away your readers, or you won't need glasses at all when you're done with this. This is how powerful biohacking is for your vision. And it's taken me a long time to find someone who really understood visual systems the way that I wanted to in order to do this.

Dr. Bryce Applebaum, welcome to the show.

**Bryce:** Pleasure to be here. Honored to be talking about how we can all unlock So much of our potential through vision.

**Dave:** Why are you such a vision nerd? Cause you're not an optometrist or ophthalmologist in the way most people would think. You don't just measure people for glasses.

You have all the VR and AR and all sorts of weird stuff. And I'll put some pictures in a before and after of my results, how my eyes track where I had [00:05:00] problems. And you're not doing it the way the profession does. So what got you off the beaten path?

**Bryce:** So I'm really, I'm here because I'm a product of this work.

So as a child, I was a mess visually. I was, Lost on the soccer field. I was in a classroom not knowing what was going on. I had trouble with interpersonal communication even because my sense of self and space hadn't developed yet. So I had these visual developmental delays. So what that meant was I had trouble focusing my eyes.

I had poor depth perception and my eyes didn't work well together as a team. which really caused me to feel like a turtle in my shell in so many aspects of life. And fortunately, I was given the opportunity to use my eyes to retrain my brain to change how I was using vision, but to develop what hadn't been developed naturally on my own.

And so I did years of [00:06:00] office based vision therapy, sensor integration based occupational therapy, But really learn to use my eyes, my brain, and my body cohesively, efficiently as a unit. And I attribute all of my success in life athletically, academically, even interpersonally, to what I learned how to do with my eyes and my brain and how I could get these sensory processing systems to be working like they're intended to.

**Dave:** Most people think that if they can see 20 20, Which means that when the average person sees it at 20 feet away, you see it 20 feet away, then you have perfect vision. True or false?

**Bryce:** False. There is so much more to vision than just 20 20 eyesight. Eyesight is a symptom. It's the ability to see certain size letters at certain distances.

That's what glasses are for, or contacts are for. Vision is entirely brain, and how our brain tells our eyes how to move together, and converge, and track, and [00:07:00] process information, and how we really make sense of the world around us, and then direct the appropriate action. So you can see stuff, well or not well, but what your brain does with that information, and how you filter and process it to respond appropriately, that's vision and that's so much more than just eyesight.

**Dave:** What percentage of people with 20 20 eyesight have vision problems?

**Bryce:** In today's world, the overwhelming majority. Vision problems are everywhere. And they're really hidden until we know what to look for. And then when you know what to look for, it's gone. They're right in front of your face. And the individual who uses reading as a sleeping pill, who avoids reading with their eyes and wants to read with their ears with audiobooks, or the child who's squirming at their desk, or lost in the classroom, or the motion sensitivity we experience, or trouble catching a ball, these are all functional vision problems.

And there's solutions for these, but most people don't know that that's [00:08:00] the scenario.

**Dave:** I got into this a long time ago when the first LED office lights came out. They were in the boardroom at one of the companies I worked for in Silicon Valley. And I would sit in those board meetings and my eyes would cross and I would just get so tired and no amount of coffee would fix me.

And I'm definitely sensitive to LEDs. I think they're bad for everyone, but this opened my eyes, so to speak, to the fact that even though I could see, that I had something else going on. And that was what inspired me to start doing vision training years ago, and I feel like I solved it enough. I do know that the TrueDark glasses I make help tens of thousands of people with light sensitivity.

When someone has Perfect vision and perfect eyesight. In other words, they've done the intensive program, they've done the software you make that does all this stuff. They've trained themselves up. Is LED light bad for them or good for them, even if they're well trained?

**Bryce:** Regardless of what tools you have in place, [00:09:00] LED light is, is not good for us.

And stress from our environment, we can't really control stress, or at least we can to a certain degree, but how we respond to that stress, that's what really matters. And you describing that when you're under that trash lighting, your eyes would cross, you know, that's the most common response to stress from a visual perspective.

Our pupils widen and we get this tunnel vision effect. Yeah. And so you were using the outside muscles of your eyes to try and compensate and kind of pull in to find the safety from all the chaos that was occurring around you.

**Dave:** I grew up with Asperger's syndrome, and what I learned when I started training my eyes was that I didn't have any peripheral vision.

My whole world was like this, and you would never know, because I thought everyone would see the world like that. So, if you have ADHD or Asperger's or somewhere on the spectrum, the odds are pretty high that you have a visual impairment. Disorder as a part of that. And what's astounding to me is [00:10:00] how quickly you can retrain some of this stuff, especially if you're a biohacker.

So you have adequate minerals, adequate fats. You can make big change. What was my vision when I came in five days ago? What was your eyesight? You mean? Oh, thank you. It was my eyesight.

**Bryce:** Your eyesight five days ago was 2040 with each eye on its own and 2025 with both eyes together. So what that means is, You had to get closer for what most people could see farther back.

**Dave:** And that's still able to drive without a prescription in most states, because 20 25 will get you there. But it's not 2015 like I was when I was 25, which is better than everyone else. Absolutely. And it wasn't 2020. After 5 days of training, it took about, what, 13 hours of training over 5 days, what's my eyesight now?

**Bryce:** 2020 missing one letter, with each eye on its own, and 2020 with both eyes together. Meaning, you learned how to discriminate, how to take in what's in front of you and what's around you, process it efficiently, but to [00:11:00] really make sense of it. I

**Dave:** went back to perfect eyesight in five days of training with you.

**Bryce:** You went from blur to HDI site in five days.

**Dave:** There we go. If you want to know exactly what I did, this is the VIP concierge expensive program. Five days, you have five doctors working, doing all kinds of different therapy. It's my vision first. com slash Dave. And there's a massive discount for you as a listener of the show, but it's still very expensive.

Like I said, I'm going to talk about what's possible when you throw everything at it. And the more affordable version of this that you can do at home is a tiny fraction of the cost of that. And my goal here is that you learn basic things you can do on the show today without having to spend anything.

And There's the affordable version and then there's the people are going to fly in and do it version. So I just shared that one and that's my visionfirst. com slash Dave. And if the concierge focus [00:12:00] thing like that, it's 15, 000 after the 5, 000 discount you get for listening to the show. Just to be super clear.

This is what professional athletes, Navy snipers and CEOs do. You don't have to do that. One of the reasons that I was willing to Work on this program and make it happen with Dr. Applebaum is that I had such a profound experience when I interviewed someone 25 years ago, he'd had 200 surgeries on his retinas.

In fact, there were like shattered mirrors. And he could drive legally and had 20, 20 vision because he'd fully reprogrammed his brain to interpret that shattered version of reality as a whole picture. This is how much neuroplasticity can do for you. And if you're already into biohacking, you've already increased neuroplasticity.

You might've read headstrong, which is a whole book on neuroplasticity. So all of a sudden you know your brain can change. Well, on this episode, what are the things you can do to [00:13:00] tell your brain to interpret your vision better? And what are the things you can do to make your eyes perform better? There are different systems and we can hack both of those.

Now, earlier I mentioned Asperger's, ADHD, attention problems, falling asleep and all that. What's causing that from a visual perspective?

**Bryce:** So our ability to focus our mind is deeply embedded and ingrained in our, in the ability to focus our eyes. If you can't focus your, your eyes, converge your eyes, track your eyes, if you can't To sustain near concentration tasks, how possibly can you focus your mind the same way that you would if that was not in the case?

So many of the symptoms and behaviors with ADHD. ADD, dyslexia, are parallel the symptoms of functional vision problems. If you have a convergence insufficiency, if you have trouble making sense of near space, if you can't look at something without the words moving, or losing your place, [00:14:00] or your eyes start to hurt, or you're leaning your body in to compensate, these are all signs with neon lights around them.

that you haven't developed the appropriate visual foundation to meet those demands. And a child who doesn't, who isn't able to articulate to their parents that, Oh yeah, when I read, I see double, or I don't know where to look when I'm talking to you, because it's so hard to focus on your eyes. Our ability to, to be present in life has so much to do with our ability to control our eye movements and any change in attention Is a change in eye movement, whether it's voluntary or involuntary, if you can't control your eyes, you're not gonna be able to control your attention the same way that you would otherwise.

And there are so many people struggling unnecessarily because of these miss diagnoses or missed opportunities. When in many cases they're right in front of you with the eyes not working together as a team.

**Dave:** I look at it kind of like, if you're a kid, you're learning how to catch, you put your hand up, it [00:15:00] doesn't know where the ball is until you do it enough times.

Learning to see properly is a similar skill, and I certainly didn't learn that because I learned to read at 18 months. And that means I was doing this all the time instead of crawling and doing other things. And by the way, guys, you can teach your baby to read. There's a book about it. Please don't do that.

It's not good for the visual and movement systems of the baby. Their brain will benefit. Mine did. But it comes at a cost. So my kids didn't learn to read at 18 months because I didn't want them to. And they read very, very well. And they move well compared to me.

**Bryce:** When every child is born, they don't have the ability to use their eyes yet.

They see in black and white. Everything is this fuzzy blob around them. And through our life experiences, if we're learning from our life experiences, we learn how to get our eyes to work together as a team. The developmental milestones are in place for a reason because we're building from a broader foundation how to fine tune these skills.

Okay. The amount of kids who have, you know, [00:16:00] who skip over crawling, or walk too soon, who have an eye turn or lazy eye. They're so much more likely to have some sort of eye coordination problem if they haven't developed the motor foundation, the bilateral integration to support that. And I think in today's world now, Screens and technology are being introduced at earlier and earlier ages for all kids.

And kids are being asked to read earlier than ever before. Most kids at 18 months, and definitely most kids in kindergarten now, don't have the visual foundation in place for reading. They're not visually ready. And yet, when we're putting our body under stress, we either adapt or we avoid. And so it follows the vast majority of functional vision problems.

Which reminds you, our brain problems, they're actually bad habits that have emerged because we're asking our eyes and our brain to do stuff that we haven't developed yet.

**Dave:** What is putting a tablet in front of a two year old due to their eyes and their vision?

**Bryce:** It is so terrible for their eyes. It is so [00:17:00] terrible for their brains.

They are not visually ready to be handling a computer blasting all this blue light and high energy light and contrast and glare to these light receptors that are in the front of their heads. There are very different eye movements required. to read on a screen than there are to read on a page or, or to engage with space.

There's more of them. They're less methodical. They're less organized. Our focusing system, the inside muscles of the eyes are responsible for clarity. They're locked in the entire time. If everybody listening now were to squeeze their fists, if you squeeze your fists for long enough, your fists start to hurt, right?

But if you were to let go and squeeze and let go and squeeze, you could do that for much longer. When we're looking at a screen, That focusing muscle behind our pupil is locked in, and it's under tension, and tension over time, if you're trying to get really buff, is nice, but for a visual, from a vision standpoint, that's not [00:18:00] a good thing, and that can create eye strain and headaches and environmentally induced nearsightedness.

**Dave:** So a lot of kids need glasses because they're getting too much blue light, and because they're focusing right up close on a tablet instead of learning to see things in the distance, right?

**Bryce:** Nearsightedness is increasing at an alarming rate in today's world and in every country that values technology and education.

Right now in America, about 43 percent of America is nearsighted. Myopia. When we landed on the moon in 1969, it was about a fourth of America. And it's estimated now that by 2050, 50 percent of the world will be nearsighted.

**Dave:** Wow. Unless they get access to this kind of knowledge, because it's not that hard to fix it, is it?

**Bryce:** It's not that hard to fix it. You got to know better, so you can do better. But also you got to get outside. I mean, we now have studies that say 90 to 120 minutes a day outside with natural light, [00:19:00] engaging with three dimensional space. That's a lot of time. Two hours? It's, I mean, it is, but kids should be playing outside.

They shouldn't be playing in their basement on screens. Tell

**Dave:** the Department of Education and all that. I recommend 20 minutes outside to get ultraviolet light in your eyes, because we know UV light exposure reduces nearsightedness, and it has a circadian reset function if you do it in the morning or at noon or in the evening.

That's So

let's assume people aren't really going to spend an hour or two a day outside, especially kids, you know, they're in school, they get out, they hop in a car, car windows are not outside because they block UV. What can we do with 20 minutes outside? What are the other exercises or things that are going to make our eyes at least good enough?

**Bryce:** I think it's important to recognize a little bit goes a long way. Getting outside for 10 minutes, first thing in the morning, end of the day, way more protective than not going out at all. But engaging [00:20:00] with space. I mean, our visual system is intended to help us guide movement and to scan the horizon for the predators and the prey that are coming at us.

So getting outside and really using your vision is so key. Ball sports, you know, applying these intricate eye movements to fast moving space to start to get the awareness of, I see something, I think I know where it is. Responding appropriately and preparing your body to where it's going to be. That's how we develop the ability to use our eyes together as a team.

We're all told at an early age to keep our eyes on the ball, but we're never taught how. We can learn how. We can learn how to use the inside and outside muscles of the eyes in synergy so that we can have depth and understand not only where we are in space, but where other things are in relation to us.

**Dave:** How many hours of training would it take, say with the new ScreenFit app, for a teenager to not need glasses, just for an average teenager? I know it's gonna vary [00:21:00] by person, but give me a ballpark.

**Bryce:** I would say it totally depends on the person, and where we are, and whether we're already on this vicious downward spiral, or whether it's just starting.

**Dave:** That's why I said average.

**Bryce:** Average, I would say, like exercise, if you do the work, you see results. So, compliance matters, doing the right work matters, but I would say a dozen hours, you're going to start to see changes. Okay. And if you're doing the right type of exercises, you know, if you're, Learning what it feels like and what it looks like to look closer in space and stimulate the focusing system and then look farther in space and relax the focusing system.

If you're developing that awareness, you can take that and apply it to so many areas of life.

**Dave:** What I loved when we did our intensive here, I had all kinds of different lenses strapped to my face, different colors, turning on one eye, focusing, turning on the other eye, VR, AR, a lot of heavy [00:22:00] duty, just visually stressful stuff.

But my vision improved even though my eyesight was already where I wanted it. And this is that, how do you biohack your vision? What that means is, I'll use less energy and it's less stressful for me to do stuff my eyes are doing all day every day Which means more energy for biohacking or making another show for you or something now Screen fit which is the new app and yes guys.

There's a big discount for you And like I said, I only talk about stuff that I use and in this case, I'm participating in. So it has 30 plus exercises that are basically structured over time, right? So it's a full year membership app. I want you to teach the most important two exercises for improving your vision that people can do without having screen fed.

What are they?

**Bryce:** The single most important first exercise you should do, and that anyone listening should do, is a near far focus activity. So it's kind of like doing push ups for your focusing system. [00:23:00] So, you're going to cover up one eye. You're going to grab Your finger, a pen or pencil, something where there's some detail.

Does it matter which finger? Oh, just kidding. The one that's not going to offend anybody in front of you. You want to slowly bring that finger towards you until it gets a little blurry. And then stop and make it clear. And you're going to hold it there for five seconds. Think about how you're looking close, how you're looking hard, how you're locking in your focusing system.

Visualize your pupil getting really small, that black hole in the center of your eye. hold it looking real tight and after five seconds you're gonna look far off into the distance throw your focus out as far as you can look soft

**Dave:** and keeping your eye covered

**Bryce:** keeping your other eye covered absolutely and relaxing focus and then hold that for five seconds and come back at the finger for five seconds and then back in the distance for five seconds so you're doing a gross Stimulation, turning on of the muscle.

Relaxation, turning off of the muscle. And you want to do that for the same amount of time with one eye as you're then doing with the other eye.

**Dave:** Okay, so you got to cover that. I can feel the difference in my eyes already from just doing one.

**Bryce:** And [00:24:00] you'll probably notice in doing this, one of the fingers, you're going to be able to hold closer than the other.

Which means if you do enough of this, you're going to get them more equalized. But then when you're going through life, when you're reading, when you're driving, you're It literally means you're focusing your eyes at different planes. We couldn't teach a brain to do that if we tried. Is there a

**Dave:** lower limit to when kids should start doing

**Bryce:** that?

Most of the skills that we train are skills that are in place by six, seven years old, but some of them in place by six months old. So there's not really a, a limit other than a child being able to understand and follow instructions. So depending on how trained your kids are and how well behaved they are, I mean, this, these are exercises you can do early on in life.

**Dave:** If you're say 18 years old, all this stuff on Dave Asprey. com, I wrote it wishing I had known this when I was 18 or 19, cause it would have saved me two and a half million dollars and a whole lot of suffering. It's not that hard. So if you [00:25:00] were to say, well, I'm sitting at a stoplight or I'm bored at a coffee shop and you do this exercise, well, someone might ask you what you're doing and hey, now you have a new friend, or maybe you can ask him out.

It's what we used to do before dating apps, but whatever the deal is, this is free. And it actually works. And you need to do this for, what, two minutes a day?

**Bryce:** I would say two minutes a day, more days than not. You'll notice a difference. And tie it to something that you do every day. Go to the bathroom. You do it when you're on the toilet.

At a stoplight like you shared. In between Zoom calls.

**Dave:** That's number one. So, you guys have one thing. And by the way, that is in ScreenFit. It is. And we talk you through how to do it. And that is ScreenFit. com. Use code Dave. Okay, and that gives you guys 10% off of screen fit.

Hey guys, after recording this episode, Bryce and I talked about things and would love to offer $200 off of screen fit.

This is really meaningful stuff and this is a giant discount from 497 to 297. [00:26:00] Just use Code Dave on screen fit.com

and screen Fit is a whole year of vision training put together. By Dr. Brice Applebaum. And it's, it's everything you need to know to not need glasses. And that's. It's, it's powerful and I've known this is possible because I did similar things 20 years ago and I didn't know how to bring it to you until now.

I've literally been searching since I started the podcast for someone who would be able to put all this together. So I'm actually really excited because having less visual stress equals more energy and more energy can go to longevity. It can go to cognitive function, it can go to weight loss, it can go to just.

being nice, being happy, being peaceful. So this is big. Number one, near, far, single eye focus. What's number two?

**Bryce:** Number two is eye stretches. Okay. So eye stretches. You're covering up an eye with one of your hands, looking as far up to the [00:27:00] ceiling as you can, where you can hold your eyes steady. And hold it for five seconds.

If you're going too high that you can't hold it steady, that just meant you went too high. Then all the way down to the floor as far as you can for five seconds. Hold it as far to the left as you can. Hold it for five seconds. The right. And then also the diagonals. Same thing, same amount of time, right eye as you're doing with left eye.

For those listening who've heard of palming, that's a real nice calming activity from like hundreds of years ago. But this is much more applicable to life because you're actually engaging with space and you're stretching the same striated eye muscles, but you're holding fixation without something to keep your eye on, which makes it easier, makes it harder and more effective this way.

**Dave:** How many minutes per day does it take using screen fit? To get the benefits where you stop having your eyes get worse

**Bryce:** Ten minutes a day.

**Dave:** Okay, ten minutes a how many days a week?

**Bryce:** It's set for five days a [00:28:00] week, which would mean in the 30 lessons at six weeks

**Dave:** Okay,

**Bryce:** but even if we did three to four days a week, it stretches out longer Each day, there's a new lesson and then it reviews the lesson from the day before But this is low hanging fruit

**Dave:** Got it.

So that's a little bit more time than it takes you to make a cup of coffee in the morning. You could do it while your coffee is brewing, though.

**Bryce:** Depends what you're putting in your coffee, though. Uh,

**Dave:** fair point. Yeah. If you're going to Starbucks and putting in 8, 000 spoons of sugar and red dye. Well, maybe not.

But, uh, if you're making the danger stuff, we're good to go. So, uh, If you were to say, I don't like having reading glasses, I don't like having visual strain or I don't like having glasses for being nearsighted. We're talking 10 minutes a day for six or eight weeks to have a massive difference. And if you keep doing it over the course of six months or a year, you're going to see profound changes in cognition, not just in vision.

And this is a very big brain hack as [00:29:00] much as a vision hack. We've gone through two exercises. We've got eye stretches. We've got the near focusing on single eyes. What's a third thing that people listening can do to have better vision now?

**Bryce:** Access periphery. So our

**Dave:** side

**Bryce:** vision,

**Dave:** this one's

**Bryce:** hard, at least for

**Dave:** me.

**Bryce:** So a simple way to access periphery would be going on walks, getting outside and being aware of the house to the left, the mailbox to the right, but both of them simultaneously. So you're kind of taking in and opening your side vision. Um, But for those who don't go on walks regularly or who want something a lot more proactive Something called peripheral pointing.

Mm hmm. So what this is I would say ideally start with one eye at a time Okay, because a lot of us will notice differences between each eye look at something straight ahead of you. So a doorknob a light switch Don't move your eye away from that And then pick out something with your side vision. So for me, I'm seeing a lamp to my right here.

Without looking [00:30:00] at the lamp, you want to point to where you think the lamp is and kind of paint in your periphery here. And then when you think you got it, make the eye movement, jump over to where your finger's pointing and see how accurate you were. If you're right on the money, awesome. Go farther out.

If you're off, bring your hand back down and try again. And when our visual system is under stress, And when we're under stress from our environment, our periphery collapses and we look like we're with we're functioning with tunnel vision. So to be able to Proactively and intentionally open up periphery that can pull us out of some scary situations like driving on a bridge where all of a sudden you're aware of what's around you and it's, oh my gosh, I got to be able to focus and stay straight ahead.

Or if you're. at a concert or a ball game and there's or even the mall or grocery store and there's all this sensory input in the periphery that you can't filter out and you feel lost or like there's this overwhelm which is really common if you've had a head injury and even [00:31:00] common if you haven't to be able to actively open up our side vision allows us to feel so much safer in space but also opens up our depth perception as well and our ability to understand where everything is in relation to us.

**Dave:** When I do some of the exercises that we did this week or the ones in screen fit I will feel like when I relax my eyes, I'll feel tension in different parts of my body. What's going on with that?

**Bryce:** so we hold stress and tension in so many different areas of our body and Vision is our dominant sensory system It should be what's guiding and leading but when it's not it can interfere in so many ways and often we compensate with our body by for what our visual system is not providing for us.

With screen engagements, tech neck, and leading in, and having our whole body compensate for what we're not able to, to engage with visually, that's really common. For a lot of people, under stress, and even with you in the exam chair at times, [00:32:00] when there was something that was really challenging, you closed off, and you held on tight.

**Dave:** Without even knowing it. Like, I'm doing really intense eye training stuff, and I don't know, but my shoulder's coming forward. And then you point out, I'm like, oh wow, look what my body's doing. What this means is that your meat operating system, the unconscious parts that run your body, It's doing weird stuff all the time in response to your vision that you don't know about and so for me doing this peripheral awareness Exercise just talked about feeling that wow, I feel tension here It's a primitive actually fear reflex And it's something that now that I'm aware of it that I can train to resolve so that I don't waste energy on it anymore but if I never even opened up my peripheral vision because I didn't know I needed to Or I didn't know that my body was doing this when I did this, I would be wasting energy for the rest of my life that could be going to something useful.

**Bryce:** And then the fight or flight response kicks in, and then you go down this vicious cycle. So commonly in, [00:33:00] in, with vision care, far away gets blurry. And far away gets blurry because we're adapting to the world we're in, the glasses we're in, we then require more help to maintain that same clarity, and we're going out this vicious cycle of our glasses prescription increasing every year, or being less and less engaged with space.

I mean, even motion sensitivity has to do with This central and peripheral processing that's not happening simultaneously. The vast majority of car sickness, motion sensitivity, dizziness, nausea on screens. Those have a visual component that are that's treatable

**Dave:** next week. I'm going to go see the Eagles.

At the Sphere in Las Vegas with some friends. It feels like that's going to be a visually stressful environment. What do you see when people are at concerts with bright lights, especially all surround ones like that?

**Bryce:** So people with, that are hypersensitive, avoid those situations. Or they go, and they go with a big [00:34:00] blackout around them, whether it's a hat, blackout, sunglasses, earphones, or staying way in the back of the, of the amphitheater or stadium, because the brain can't filter and process all of that sensory input at the same time.

That's a sign of brain function. And, you know, our visual system, there's more areas of our brain dedicated to processing vision than all of the other senses combined. Two thirds of the neurons coming to our brain come from our eyes. So when there's disruption to brain function because of a concussion or traumatic brain injury or a developmental anomaly or mold or toxins or something from our environment, that's that changes how we're using our brains.

We go into that fight or flight response that you described, and it makes something like going to see the Eagles, a miserable experience that you're in your head thinking about leading up to that point. You're there and you just want to retreat and leave and you can't get the enjoyment [00:35:00] that really should be accessed from, from that experience because vision is interfering.

**Dave:** When people do the kind of vision training that You do during the intensive here and guys that's my vision first comm slash Dave is the thing that takes you to the Intensive program that we just developed to push you really hard If people do that or they do screen fit at home for a while What will the change in their experience in a situation of visual overload be?

**Bryce:** Vision will start to provide order from all of this disorder and vision You With the right work and the right compliance can actually open up your world and be the dominant sensory system it's intended to be.

**Dave:** So what is the change going to be?

**Bryce:** The change will be, you can go to a concert and actually enjoy the music and enjoy the camaraderie with your friends.

You can go to a mall or grocery store and not have to nervously scan across every aisle to figure out what you're trying to find. You can [00:36:00] have vision touch the world in the way that It's really supposed to, rather than feeling like I did when I was a child, like a turtle retreating to your shell in so many aspects of life.

**Dave:** It's kind of funny Years ago. I spoke on stage for Tony Robbins a few times. And so I'm sitting up in the the VIP section and Kim Kardashian sitting behind me and she takes a picture of Tony Robbins. I turn my head sideways And she posted, it says Tony Robbins in big letters, but I'm in the foreground and I'm wearing true dark glasses and noise cancelling headphones because it is really loud and really bright in those things and I just get tired after a while.

I always have in environments like that. So that was my, like the one time Kim Kardashian posted my picture. So I reposted it and said the one time Kim Kardashian thinks I'm Tony Robbins. Cause you know, it said Tony Robbins, but he was obviously the guy, the big guy in the picture. So it made me laugh. But the fact that that photo, I've got the glasses and the headphones on [00:37:00] that are canceling noise.

It's because I had Asperger's syndrome and because I'm optimizing my cognitive function and the definition of biohacking change the environment around you and inside of you. So you have control of your biology. In my case, I'm happy to filter out super bright light. I think that's good for you at any concert where they're using bright LEDs.

I'm also happy to filter out really loud audio because I have really healthy hearing. I just had it tested. I just did a episode with Starkey where we had an audiologist come in and I've got Great hearing. And it's because I don't go to concerts. So all of us can benefit from reducing junk noise and reducing junk light, reducing intensity.

But a lot of people could go without reducing it. They wouldn't get as tired as I would. Do you think now that I've done this vision training, I'm going to keep doing the screen fit stuff. Uh, will I reduce my visual sensitivity even more?

**Bryce:** [00:38:00] Without question, your brain is unique in a lot of ways, but very hypersensitive to small visual changes.

**Dave:** And you measured that all quantifiable.

**Bryce:** We found your threshold and we, with the right work, integrated movement and balance and thinking and your vestibular system with your visual system to essentially reboot your brain and recalibrate a lot of the neuronal pathways that were either there and you weren't tapping into them as efficiently as you could or should or in your case with depth perception and some of the areas where you're ignoring information from one of your eyes.

re established function and tapped into new pathways that were not serving you or not there previously.

**Dave:** It's kind of funny because I've done a computerized training in my depth perception. So it's about as good as a sniper. It's in probably the [00:39:00] top 2 percent of depth perception in the world, but I didn't do it while moving around and I didn't do it with each eye separately, although it takes two eyes to see depth.

So it turns out I, in combination, I could easily pass the test. But when you had me do more challenging things, I couldn't do it anymore. The world went

**Bryce:** flat. Yep. And In life there's movement and there's stuff everywhere and you have to be able to filter what's appropriate versus what's not. No one is born with depth perception.

We develop these cells in the back of our brain, in our occipital cortex, that only come from two eyed learning experiences. And any brain, at any age, can redevelop these cells, even if they've never been in place, or if they've been lost or damaged from an injury. We can rehab, we can put the pieces back together.

But it's, it's a, One of the biggest kept secrets in all of health care, because I was taught in school. Most doctors are taught in school that there's this critical [00:40:00] period for neuroplasticity. And after your eighth birthday, you blow out the candles and then what you see is what you get.

**Dave:** Yeah, that's such nonsense.

In fact, Eric Kandel, who won the Nobel prize for proving that was false was on this show talking about it. That's how recent this is.

**Bryce:** I mean, it is a, it's, it's. a difference between vision lost and vision gained. If you or I were to cover up an eye with an eyepatch for six months, if we took off the eyepatch, we'd be sensitive to light, but we wouldn't have lost sight.

If you take a six year old, put an eyepatch on their eye for six months and take it off, there literally will be eyesight lost. But in terms of what can be retrained, reestablished, any brain at any age can develop the ability to see in 3D, but dynamically. So, A lot of the work we did with you was incorporating stress from the environment and seeing when these maladaptations, when these bad habits came into play, you learning what it feels like, what it looks like, and the depth that ensues when you are [00:41:00] using your eyes together.

And then teaching you how to find that light switch, turn it on and keep it on as we're then asking you to do more and more with those skills.

**Dave:** You ever hear of these spiritual tribes in the middle of nowhere who take a few select kids and raise them in caves until they're five or six with no light whatsoever.

What's going on with that?

**Bryce:** I mean, light is so powerful and our ability to see is literally taking light and turning it into an electrical signal that gets sent from the front surface of the eye to the back of the eye to the optic tracts to the area of our thalamus that processes and filters it, then to the back of our brain.

If we're deprived of all of that, you're having to rely on All the other sensory systems, like

**Dave:** hearing and touch and, and smell and all that smell and proprioception and when they take the kids out though, when they're five or six and they've never really seen light, do [00:42:00] they

**Bryce:** learn to see it's a big overload at first, but they learn to see it can be redeveloped or established at any age.

But then the other systems are heightened. So they're doing this to give

**Dave:** the kids a gift in some way. So that's my

**Bryce:** understanding.

**Dave:** They almost have ESP. Yeah. I

**Bryce:** mean, a lot of people who have a sensory system that's limited developed a heightened sense of awareness or control with the other systems to compensate.

**Dave:** If I was to go back and write the Constitution, right after the First Amendment, you know, you can, you have the right to say stupid things because being wrong is necessary for thinking. You have the right to protect your right to say stupid things, which is the Second Amendment. The Third Amendment would be you have a right to darkness.

Because if you're always in light the way most people are all the time now, you never actually experience the biological and I think psychological benefits of darkness.

**Bryce:** When you're in light, you're experiencing [00:43:00] autonomic dysfunction. You're experiencing stress. Imagine life without stress or limited stress or stress you can control.

I mean, how much happier and more evolved and more you can accomplish when you're not just trying to survive, but you're actually thriving. I mean, we can teach any brain to get to that state with eyes open, even with the junk light around us, but by establishing the superhuman visual brain that can handle all of that information.

**Dave:** It's been on my list for a long time. I, you've seen a bunch of people lately talking about, Oh, I, I went through a dark meditation. So there's Vipassana, uh, which is something I've been to monasteries in Nepal and done silent meditations and things like that. There's also something called Vajra armor, which is a Buddhist practice of specific visualizations, always done in darkness, always for 10 days, different than Vipassana that's said to do all sorts of magical [00:44:00] things to you.

What do you think is the value of being in darkness for several days when it comes to vision and eyesight?

**Bryce:** Being in darkness for any amount of time allows you to access higher level thinking capacity and ability to visualize. As hyperbolic as the sounds, I've literally worked with people who came in unable to tell whether the lights were on or off, who we taught how to have vision.

And maybe not crystal clear eyesight, but there's a gentleman that we worked with who had two strokes, one in his occipital lobe, where he would leave vision training dripping in sweat.

**Dave:** Yet

**Bryce:** we weren't doing

**Dave:** aerobic exercise, right? When I started my vision training, it was physically exhausting, yeah.

**Bryce:** And we talked him through what was happening in front of him and asked him to really visualize it and to think in mental pictorial images and to establish the ability to process information without [00:45:00] the signal coming from his eyes.

And by the end of treatment, he could follow his wife's moving hand around his house. He could watch TV. It wasn't clear, but he could see TV and I truly believe he prevented a lot of unnecessary struggling, falls, things down the road, but when everyone else had kind of given up on him.

**Dave:** Have you seen kids grades improve from doing your vision training?

**Bryce:** If vision training doesn't improve quality of life to the point where it's changing a child's life, then one of us is doing something wrong. The effort and frustration and, um, You know, not giving up on yourself that occurs for so many kids, which is why they are so frustrated. Those are clear signs that they need help and they're searching for it.

I wish I

**Dave:** would have had access to that. I think back to like ninth, 10th grade, knowing what I know now about my vision and how my vision evolved. [00:46:00] If I'd have been able to do 12 hours of work, it probably would have improved not my grades. I'm pretty smart. So my grades were, were pretty good. But my behavior was atrocious and I struggled a lot like I suffered quite a lot and It would have just made things so much easier and no one told me no one even knew back then but we know it now So I'm just gonna straight up say it if you're a parent and you have kids who are struggling in school 12 hours of work Is not that much work and it'll probably make your kids perform better at school, but it'll make them happier.

It'll make them behave better at home to where they like how they behave because they get to choose it instead of being triggered and The worse the light the more the screen time the more they need it So I'd actually I never asked you this before With screen fit the app that does all this stuff if a family buys it can everyone in the family use the same account I don't know

**Bryce:** Yeah, if anyone [00:47:00] who signs in a screen fit, as long as the parent wants to be the teacher for the child or the child be the teacher for the parent.

Okay, so you can share it. So absolutely. So the whole

**Dave:** family, you get one screen fit account. You all do the vision training exercises and it'll improve your parenting. It'll improve your adulting. And if you have a job or you're an entrepreneur. The ability to focus, to stay on task, focus is a visual thing.

It's also a mental thing. We train focusing stuff at 40 years of Zen, which is electrical, but tying the visual system, which is part of the brain into the brain. This is a very important kind of brain training. And again, you learn the exercises, the basic ones for free on this show. So you have the value and you can do that today and tomorrow.

Just do it for the next two weeks and watch what happens. You can get screen fit. It's screenfit. com, use code Dave, and get 10 percent off, and it'll work for the whole family. And if you want to fly out and do the VIP [00:48:00] thing that snipers and celebrities and, and pro athletes do, the one I just did, and the one that we just co created together with some extra brain enhancements.

That is my visionfirst. com slash Dave. So you can pick one. And again, the last one is a VIP concierge and it's expensive. You don't have to do that unless you just need to cram it all into five days and you want to get it done and expect to be tired when you do it. It is a lot of work, but it's worth it.

I just finished it and I'm very glad. I feel like I got my eyes back to where they were 20 years ago and you can get rid of your glasses. It's that straightforward. So however you want to do it, do it over time, six to eight weeks with screen fit. You do it in five days with my vision first and you can say, I'm not sure I'm just going to do the exercises that I learned on the show.

And when you do those things, you'll still see a benefit. And [00:49:00] if you do those three exercises and you see something change, That is the clearest sign on earth that you should get screen fed. And, again, thank you. I'm not here to sell you anything. I'm here to tell you the things that will take the least amount of effort, the least amount of energy, and least amount of suffering, and least amount of time and least amount of money to get you the most results.

And I talk about all the technologies from stem cells and gene therapy to this kind of stuff. And I do my best to always tell you, here's why it matters. Here's step one, step two, step three. So you've got all of those here. One of the things you can do is you can look at someone's age visually. And how would you say my eyes were if you had to pick their, their years?

**Bryce:** So am I going to share how old you are for the audience because that's up to you to share

**Dave:** I can share that So my lab tests say I'm mid 30s and the calendar thinks that I'm [00:50:00] 52 And I identify with my lab tests because they're quantifiable But whatever the deal is a lot of my friends have reading glasses and things like that or glasses I don't have any of that stuff.

I've never needed them But where were my eyes when I came in from an age perspective and how do you know

**Bryce:** when you came in five days ago? You had the focusing system of somebody in their late 40s. You had the tracking system of somebody whose brain was fatigued and just zapped all day long. And I've had

**Dave:** a traumatic brain injury, too.

**Bryce:** It was clear from the testing. After five days, you have the focusing system of somebody 32, 33 years old. There you go. You improved your eyesight. In the distance, like we talked about, but at near, you went from needing a moderate Over the counter reader from most doctors perspectives. I would have never Not even needy one, but actually saying oh, this actually makes things worse.

Oh, really [00:51:00] you went from showing a Prescription that would have given you glasses to correct astigmatism and nearsightedness to literally that disappearing Objectively, not even measuring it.

**Dave:** They would have given me glasses for 2025? They would have. Oh, that's ridiculous. Because That would have just made my eyes weak.

**Bryce:** 100%. But most doctors are taking a reactive model and saying, Well, we all have to see the same. We all have to see these tiny letters, even though no two people see the same. I'm a big believer the ideal prescription for anybody, if any, is the weakest lens possible. Yep. That's the most balanced between each eye.

Okay. But that improves performance. If we're not improving performance, why are we even relying on anything else? Fair

**Dave:** point. So I went from a focusing system of say 47 years old to focusing system of 32 years old. And how many lines on the chart would that, would that

**Bryce:** show at near you dropped from, you dropped about three lines.

So from [00:52:00] 2040 to 2020 in the distance with each eye on its own, same thing, 2040. To 2020 with both eyes together 2025 to 2020 in the distance, but there really should be a benefit of having two eyes. We have two eyes for a reason. So typically we don't see as well with each eye on its own. If there is any type of correction, but there's a huge benefit to being able to lock in with both eyes as a unit.

I think the key, though, for you was you developed it. A flexible range at every distance where there's less effort required to seeing the quality of how you saw you were making crazy faces, squinting and leaning in the beginning. I

**Dave:** was, I was like, I can do this, but it was work

**Bryce:** and today it was like, no big deal.

**Dave:** It was definitely less strain to do it. Okay to sum it up went from 2040 in each eye individually or 2025 back to 2020.

Mm hmm.

And [00:53:00] in five days of training with you I got rid of astigmatism.

Mm hmm

It's completely gone and for very, very up close fine things where I would have needed what the weakest reading glasses, although I never have used them,

**Bryce:** not even the weakest, like moderate,

**Dave:** moderate.

Okay. And so that's gone. And now I can see the things up close without

**Bryce:** you

**Dave:** did all the work. Well, you, you did the training. What I'm saying is, I showed you what to do, but you came in ready to roll. And that's what it requires. If I can do this in five days, this means anyone there, if you're listening and saying, I don't like my reading glasses, you could come here to Bethesda and you can do this.

And in five days, you likely won't need reading glasses either. Or maybe it'll take you a couple more weeks of doing followup exercises, but this is part of longevity and it's part of making your brain work. And there's no reason. that you need glasses, except that your eyes aren't trained or possibly for nearsightedness, you're not getting enough sun and ultraviolet in your eyes, which is part of it.

All of this is trainable. [00:54:00] All of this is biohackable and no one talks about it. And it's my job on the show to find the people doing. The cutting edge stuff and price. I'm, I'm really impressed with my experience. We have a whole team of doctors who worked on my eyes and there's no surgery or anything like that.

It's just training. It's like crossfit for your eyes kind of a thing, but not cross eyes for your fit. That's something different. Anything else you'd

**Bryce:** like to offer

**Dave:** listeners

**Bryce:** before we

**Dave:** go

**Bryce:** with all aspects of medicine, we should be partners with our doctors and we should be trying to live the best, most fulfilled life.

When you, when somebody gets a new pair of glasses and they don't seem right, They're not right. And people will tell you, Oh, you'll get used to them. Yeah. Our brains are incredibly adaptable. That's not a good thing. So at a minimum, anybody can prolong the increase in prescription. Most cases reduce it, but we need to all be really thinking about vision as a piece of the puzzle.

for all of the symptoms and all of the areas of [00:55:00] life where there's struggle that we discussed today. And when, if you're a parent and you're hearing somebody tell you that your son or daughter needs medication for their attention, or you're getting motion sick and you gotta take meds for that, or you have terrible headaches and you're going down this crazy cycle of seeing all these specialists.

Start thinking about your vision, because in most cases, that's going to be a piece of the puzzle, maybe even a massive one.

**Dave:** And it's a very low hanging fruit, because it's 12 hours of training over 6 weeks. And I'm all about, you know, smarter not harder, wrote a whole book on it. About, here's the things that work in less time than what you're doing now, so you can have more time to do stuff that matters.

And ScreenFit is something new. There's nothing like it that I've seen before. And I've been looking at all the vision apps and I run a vision company, TruDark. So I'm into this and have been for 20 years. And you're the first person I've seen who's put together the cutting edge tech. [00:56:00] All the VR and AR and touchscreen.

It's it's a lot of work, but you're the only person who's put all that together in a in a framework like that And the fact that you said well, how do we let this work for people without doctors? Just get the app do the exercises and they're all trained and then see the results I appreciate that because it's it's all of our jobs as biohackers to get the information about what works and what's possible in All of our hands, because then when someone comes in and says, Oh, you need glasses, you can say, why?

And you can make a choice.

**Bryce:** And we can biohack our vision, just like we can biohack our bodies and our brain. And even though even more people can tell you that's not possible. The proof's in the pudding.

**Dave:** It is. And when you throw your glasses, you'll know what I'm talking about guys. My vision first. com slash Dave for the VIP concierge.

When you go to that URL specifically and only that URL, you get access [00:57:00] to the program that we co created that includes things that give you more endurance for your brain than you're otherwise going to get. So you can cram more training into the amount of time you have. And if you would like to get the at home version, that is screenfit.

com use code Dave. And if you don't want to do any of that, do the three exercises you just learned in the show. So there you go. Upgrade your vision. Totally worth it. I'll see you on the next episode. See you next time on the human upgrade podcast.