Brain tumors will push if they hit the visual cortex in the back of the brain, it'll show up visually in your eyesight in distinct patterns. And tumors can also push on the optic nerve track. And so when looking at the optic nerve under the microscope, we can see pallor and sometimes even inflammation.

And that'll tell us, give us a hint that, hey, this person's got neurological conditions.

Got a new interview for you today with Dr. Joseph Allen, who is a practicing optometrist in Minnesota and the founder of the Dr. Eye Health YouTube channel with videos about eyeballs all things vision and eye health related, from glaucoma to dry eyes, to questions about contacts and glasses and floaters.

And he encourages his patients to adopt a plant based diet for optimal eye health. And so that obviously caught our attention because we thought, wow, this is great, here's a plant based optometrist. And so I'm excited to talk to Dr. Allen and pick his brain about eye health. So hey, welcome.

Hey. Thank you, Chris. This is again super cool, honored to be on here. Love what you guys are doing. So again, huge. Thank you. Awesome. That's great. Well, it's mutual. We're glad to have you and glad to talk and learn some new things.

First we're going to talk about me,

please. Both my parents wear glasses. I've always had perfect vision until

about a couple of years ago. Like between one and two years ago, I started to notice that I was having a hard time reading the tiniest print on the back of supplement bottles.

So I'm like, hey, wait a second, this is not cool. So anyway, I'm hoping maybe we'll get to some solutions or some good ideas for that. But anyway, yeah, so this is of particular interest to me too, because if I can avoid eye or vision deterioration as I age,

that's important to me. If I can improve my vision, even better. So anyway, any thoughts on that? Yeah, well, I don't know your age, but I'm going to guess you're probably getting into early mid 40s. Mid 40s? I'm 45 just based off of that symptom. So that is a common thing that basically if you live long enough, you're going to start to hit something called press biopia, that's the medical term for it.

But that's where the lens inside of your eye, kind of like a glasses lens, except biological tissue. It's flexible. It's thin and flexible, in fact. You ever heard that kind of that myth that every seven years your body recreates all of its cells? Have you ever heard that before?

Well, it's not entirely true, because the lens inside your eye that you were born with, those cells

don't cycle over, they just build on each other. And it gets bigger and bigger and bigger. And as you get older, like young kids, they have such a thin lens, they can use their eye muscles.

It changes the size of this lens inside the eye, lets them focus to the tip of their nose. But as you get older, gradually that lens gets thicker. Another layer every year. It's like the rings on a tree. You can see the rings in it. And then finally, by the time people are mostly mid 40s, there's so many rings to it.

And then the lens starts to crystallize. It goes through some oxidative processes where it crystallizes and it becomes rigid. And then no matter how much the muscle inside your eye, the muscle is still working, but the muscle is trying to pull on this really dense lens and it can't change.

You're saying it basically becomes less elastic, right? Exactly. Yeah. So the lens inside your eye is less elastic, and so it's much harder to focus on near objects, and there's mathematical algorithms that predict it. And at one point in school, I had memorized those algorithms, but at this point, it's not practical to memorize those.

Now, aren't there some people that never need glasses? Or is that not true?

Up into their seventy s and eighty s? There are some people who get a buy, and usually they get by

this same process of press biopia, this changing of the lens structure still happens for those individuals. However, usually their pupil size is very, very small. As young children, our pupils are usually very big because our autonomic nervous system is more in. The kind of the excited fight or flight mode where pupils are really big.

And as we get older, it gradually becomes more parasympathetic and more rest digest. And so pupil size gets smaller and smaller. So if you have a family member who's in their eighty s, ninety s, if you ever look at their eyes, their pupils are probably really small. And that has that advantage of kind of eliminating a lot of extra glare and stray rays of light.

And that helps them improve their depth perception

in what's called the depth of field is the technical term. And if you're into cameras at all, that's a good way to think about it. They've improved depth of field because their pupil size is so

high. Some old folks have smaller pupils, and that helps them not need glasses, is that what you're saying? At least reading glasses in that sense. In fact, there's a new medication that was FDA approved. It's not really a new medication. The Active in media has been around for like 100 years.

But they found a new formulation that was FDA. Proved, and that constricts your pupil size, so you don't have to rely on reading glasses and things like that all the time. Interesting.

Okay,

if you were me

and you well, you don't have to be me, you have patience.

What do you suggest? Obviously it's not debilitating, it's only the tiniest in print, right? And usually I can read it, but I have to do this thing, I have to do this right here,

you know what I mean? I used to be able to read it up. Arm is not locked. Back it up a little.

Certainly the easiest thing most people reach to, because it's economical is they reach for reading glasses over the counter cheaters. You can buy them in a bundle pack of ten of them for a few bucks. They're not the best quality, but people like them because they can leave them around the house.

They don't need to worry about them if they lose them. They're pretty affordable for people who do need prescription glasses. You will see better if you want to get something prescription based, but you're going to have to go into that world of the term bifocal, and nobody likes the B word.

In the eye care world, there are progressive lenses, those are the no line bifocal, or if you're in Europe, they're called verifocals, but those give you a transition zone. Instead of high beam and low beam, you have high beam that gradually gets stronger to low beam and then that allows you for intermediate distance things like your desktop computer dashboard on your car.

But with those lenses, you get distortions. What about this idea that once you start wearing glasses,

you become dependent on them? Obviously, but then can that accelerate the progression of your eye vision? Degeneration? I'm not articulating it well, but you know what I'm getting at. Yes, I get this question quite a bit and I think it's understandable why people may think that

the wearing of glasses, especially as an adult, has no physiological change to the eyeball itself. It doesn't anatomically push the eye in one way or the other. The feeling that wearing glasses, especially like reading glasses, is contributing to any sort of degradation or dependency on wearing eyewear glasses is more

kind of a mental awareness of the clarity of your vision because people can get by, or in the eye care world, we call it being 20 happy instead of 2020. Like, people are 20 happy. They're not

seeing very well, but they can get by. But as soon as you introduce them to what the world can be like, how clear it can be with correction, and then they get used to things being that clear, then they take them off.

And so now they're like comparing really good to being what it was and now it's like, wow, I can see this different sense. Yeah, anatomically, there's no change in the eye that's happening. Yeah, the way I think about it, which is probably totally wrong, but I equate it to almost like

almost like atrophy, where if you never used your left arm ever, right? If you put it in a sling and never used it, it would atrophy it become weaker. And so the way my mind works, I think, well, if I put a glasses on, if I'm making it easier for my eyes to read bigger print or small print or whatever it is, then would that accelerate atrophy instead of challenging my eye to read something right?

I don't know. The musculature doesn't actually change. And they've kind of found that in research. There is a little bit, as people get much older into their fifty s, sixty s, they can have

some decompensation in the way their eye muscles coordinate. But that's largely because

their ability to focus at near

is so neurologically tethered. And when you lose that ability, like, you're slowly experiencing it to focus, then there's almost this like a push pull effect with the eye muscles. And now that you're not pulling with the eye muscle as much, your eye muscles learn to relax a little differently.

And so some people do lose that.

The one thing is that there is some good evidence if you want to get into eye muscle exercises in the eye care world. We're very cautious about that because some people just go way off of evidence based medicine into the world of eye exercises. But at least for what's called accommodation.

And that's your near focus ability. Like you're having

that flexibility of the lens inside the eye, no matter what, no matter what you do, it's slowly going to get harder and more rigid. But doing some kind of near work, pushing, extending up close, looking far away, kind of going back and forth, that's a little bit like doing weightlifting in a way, for the eye muscles.

Yeah. And you may be able to maybe extend or prolong your ability to focus at near for maybe some time, maybe a few years. So maybe but

inevitably you'll probably end up needing glasses to some extent for like reading glasses, but

you may be able to extend that a little bit. Hey, I'm willing to try. There you go. So how did you get into the plant based diet? What connection does that have to eye health?

And before we get into that part, but how did you discover it?

What was your progressive

dietary journey like? Yeah, I appreciate you asking that. I've always been interested in just my health. And then physiology was something I really loved when I was an undergraduate doing my premed education, and I thought I was really healthy. Back then, and all through optometry school,

I ran a lot. To me, I thought I was eating pretty healthy, because I would buy a frozen bag of mixed veggies with carrots, peas, and some green beans, and I would heat them up in the microwave and eat those with, like, couscous. I thought I was being very healthy.

But then I got into residency, and I was doing my residency at the VA. And in the eye care world, we study a lot about retinal diseases, eye health diseases, all these different things. And we talk about diet. Now, we don't really talk about diet, but we talk about nutritional studies and how that affects the eye.

And with diabetes, that's a big part of our education. But in my residency, I saw a lot of sick people. I'm at the VA. I'm seeing mainly older gentlemen, and they have every disease under the sun diabetes, high cholesterol, they've had multiple strokes, high blood pressure, impotence, had multiple cancers, depression, blindness, many different diseases in the eye, very complex cases.

And out of my entire residency, I could probably only count maybe on one hand how many guys would come in that were of older age, not on medications, no real diseases, mentally clear. And I would ask them, like, you are different. What are you doing? What's your secret? And every single guy said, Diet and exercise.

Which is great that you're asking, because so many doctors don't even bother to ask, right? But that at least kind of tipped me off, right? But I think you always are told that, and you know that through school, oh, diet and exercise. But it never really stuck in my head.

I always thought, oh, well, I'm in these educational institutions I'm seeing, and I'm in the VA. So everybody's unhealthy. But then I started practicing. I went into private practice, and this is 2016, and I was still seeing it. I was like, oh, these are just normal people. These aren't just like veterans who were exposed to Agent Orange in Vietnam.

No, these are just normal people living day to day. And I'm still seeing all this disease. And I was like, Something's wrong. And a big part of healthcare, especially eye care, is diabetes

management and evaluating the eye for diabetes because it can be so destructive and cause blindness. So with that, we have a requirement.

It's in our electronic health record. In the EMR system, we have to click a box every time we see a patient who's diabetic. Did you do a dilated eye exam? Yes. Did you give them education about tight blood sugar control, diet, lifestyle? You have to click yes or no.

Did you do this? You have to report it. And I was like, I give the at the time, I was just giving the very structured you need. To continue with your family diet, your primary care provider, tight blood sugar control is going to reduce your risk of diabetic eye health issues down the road.

That's what most doctors will say, just because for time, and that's it. But I reflected education, maybe a pamphlet. Yeah, that's it. And so I reflected, and I was like, what really should I be educating? And if somebody asked me, hey, what should they be eating? What lifestyle should they be going through?

I was like, I don't know.

Let's try to figure this out. And so I ultimately ended up listening and found Dr. Neil Bernard

with his PCRM information. And then from him, I jumped to a couple other doctors, started reading articles, and I was just like, you know what? I had a few friends at the time who were like, vegan, and I was like, you know what? They've been doing this for a few years.

It didn't kill them. It's not going to kill me to try it. Let's try it for three months, see how it works. And so I started tipping my toe into it, and within just even three, four weeks, I had personal benefit experience, namely my skin. I had bad dermatitis that cleared up.

And then my GI issues. I know you've had some history with that, but my GI issues, which I've had all my life, bad gas, bloating, like chronic bouts of constipation, diarrhea, all these terrible things that cleared up. And I had felt the best I had ever felt and continued to just kind of dig into it, understand and see.

I started seeing the connections of different eye health conditions, specifically being that I'm so interested in practicing eye care.

So that's kind of how I got into it. But thanks for asking. Yeah, no, it's great. I think that's fascinating. I think so many people that are like minded or that are eating a whole food plant based diet, they found it out of a need. Sure, their health wasn't great.

They had some issues. For me, it was cancer. It was a pretty serious one. But yeah, they found it, and it gave them such a tremendous benefit that it was like, hey, this works. This is good. This is good for me. So let's talk about diet and eye health.

Obviously, there's some big connections there, and you already alluded to this. I mean, many of these people, you were seeing cancer, heart disease, high blood pressure, high cholesterol, all kinds of problems and vision problems, right. And obesity. So where do you start with this kind of conversation about diet and eye health?

For a lot of my patients, I'll see people for just routine care. Like, they maybe don't have a diagnosis of diabetes or high blood pressure, cholesterol, anything. They'll just be coming in because they've got some blurred vision. They need glasses of. Contact lenses updated or they're interested in lasing, something like that.

But no matter what, I've made it part of my routine to educate people on just things that they can do to take care of their eyes, to see their best today and then tomorrow and 30 years from now. And I always just try to mention, hey, you should be eating more fruits and veggies.

Like that's the easiest thing. I try to at least say that and I specifically try to say green leafy veg vegetables. I try to give them that recommendation because more evidence is showing that that's good for your cardiovascular system and the nitric oxide release. And that also has a tie to glaucoma to some degree.

So I usually give that at least baseline information. Now, of course, if somebody has a specific disease, then I go a little bit more deep into it.

But I have to also try to be courteous to individuals. I always ask them like, oh, tell me what's your diet like? Are you interested in knowing a little bit more? Because some people just they're in a rush, they got to get back to work, they're on their lunch break or something like that.

So I usually ask those sort of questions and give my normal conversation about it. Are there any studies that you're aware of that are,

I'd say, strong correlation studies between, let's say, saturated fat in the diet or animal protein in the diet? Obviously, high sugar is pretty well known, but the animal protein or saturated fat connection is pretty strongly associated with cardiovascular disease. But what about specifically with eyes and eyesight? Yeah, there was a publication, I think it was 2016 and I can maybe get this to you so you can provide it.

They have done some more review studies and looking into nutrition in different eye diseases. And the big ones, if I recall right, they were looking at cataracts glaucoma

and macrogeneration as well as other associations like diabetes, diabetic retinopathy specifically.

And they have reported that diets with higher amounts of meat and higher cholesterol amounts,

which most of it comes from meat consumption, is associated with higher levels of oxidative stress related eye diseases, namely cataract development. Some level of macular generation studies have shown that saturated fat, higher levels of saturated fat intake increases your risk for macular degeneration.

Use of statin medications to lower cholesterol also is associated with decreased levels of retinopathy from diabetic retinopathy as well as decreased risk for macular generation. So there is quite bit of more evidence that has been looked at and even just the last decade. Showing evidence for that. So let me try to explain it, and you correct me, please, if I'm wrong here, because I know people watching and listening are trying to connect the dots.

But from what I understand from my own research and from interviewing lots of doctors talking about this kind of stuff is that when you're eating a diet that's high in saturated fat and cholesterol,

the tiniest capillaries in your body, in your eyes,

in your ears,

in the male genitalia are the ones that get clogged up first. And so it's pretty well known that erectile dysfunction is an early warning sign of cardiovascular disease, of arterial plaque. And so is it also true or plausible or demonstrated that the same phenomenon is happening? Let's say, when the tiniest capillaries in your eyes start to clog up with cholesterol or fat, that you're restricting blood supply, right?

And that is causing I mean, lack of blood flow is going to lead to deterioration.

You largely are very correct. The one thing I know is saturated fat and trans fats, those are more strongly associated with atherosclerotic development. And that atherosclerosis of your blood vessels is certainly strongly correlated with a lot of retinal diseases. The blood vessels in the back of the eye, it's a scary, beautiful network.

It's very similar to your kidneys. It's like a giant bundle of just crossing blood vessels. And we're even finding more information about these blood vessels as new technologies coming up. But

at heart, yeah, you are absolutely correct. So I see especially

a lot of my education and my current still practice is managing diabetic retinopathy, which the reason why eye care professionals even see diabetics is because it's the only direct way to visualize damage of the blood vessels from diabetes. Your doctor can do blood tests, see your A, one C, your glucose levels, and they can see maybe somebody maybe getting some sort of neuropathy in their feet.

But in the eye, we can directly see the blood vessels developing micro aneurysms or these little out pouchings. In the blood vessels. We can directly see the bleeding and hard exudates or fats that are coming, leaking out of the blood vessel and getting lodged in the retina. We can also see cholesterol and calcium.

Basically, chunks lodge themselves within the large. When I say large, these are still very small capillary arteries within the eye. We call them hollandhorse plaques. And we'll see cholesterol like, whoa. Oh, someone may be asymptomatic. They have no visual changes, but we'll see these chunks of cholesterol

stuck in their blood vessel. And when we see that, we have to send somebody to basically have to rush them to the stroke unit because we don't know when that got there. It could be just that moment. It could be just a matter of time before that dislodges and circles back and hits them in the brain and they have a full stroke.

So as far as the cholesterol specifically, that is not necessarily as strong of a correlation, I believe. But I know saturated fat and trans fat that is pretty well studied and understood,

especially in the eye care field. That is fascinating. That's amazing. Yeah. I've never heard anyone talk about this, but just being able to see the damage to blood vessels in the eye as a sort of, like, obvious

well telltale sign that there's a lot of cardiovascular problems, you know, elsewhere. Do you ever see people with, let's say, cardiovascular disease that don't have eye problems? Or are they almost always hand in hand? They're almost always hand in hand. Something as simple as high blood pressure, like, we know that is silent killer.

It happens in the eye. We can see the blood vessels change over a lifetime due to high blood pressure. In fact, my own father, I have to thank one of my mentors, his eye doctor, because he caught my father's high blood pressure. My father had no idea they had blood pressure issues.

And then he went just for a routine eye exam, and his doctor had to say, like, whoa, this is so severe. We have to check your blood pressure right now. And then they ended up calling an ambulance to take him to the hospital because it was so high. We see that in the vessels.

Yeah. For people, it's not always drastic. Like for his case, where if your blood pressure is very high I just had a gentleman last week, his blood pressure was over 210. Over like 110. That's severely high. He's 320. Yeah.

In those high, terrible situations, you do have retinal bleeding. So the blood vessels are leaking open and bleeding into the eye. Sorry, I said 320. And I was thinking about cholesterol. Yeah, I kind of caught that. But it's still very high blood pressure. Yeah, his blood pressure was high, and then

when it's that extreme, your optic nerve swells. So he had pressure, the optic nerve itself. What happens is that the pressure basically it starts coming edematus and swollen, so when we look inside, you can see the nerve, like, come coming toward you. And he started having visual problems, and that's why he.

Came in, and ultimately, we had to refer him back to the stroke unit in a hospital in the area

so they could get his blood pressure under control.

For people who just have mild high blood pressure issues, we'll start to see the vessels Getting narrow, and then the artery and the vein, they share the same tissue. It's called an adventitial sheath, and the artery crosses over the vein, kind of like I like to describe it like a garden hose.

Like they're crossing in the summer. They're laying on top of each other. But as the artery becomes atherosclerotic and hard, it begins to push down on the vein. And if that's pushing on the vein, it's causing more turbulent blood flow in the vein. And if you have other atherosclerotic disease, you're at risk of a stroke.

That vein can more or less Get clogged up, and then pressure builds up, and it bursts. And so you'll have a vein occlusion, and that can be associated with other levels of ischemia, where just blood flow isn't getting to the retina. If there's no blood flow, you're not getting nutrients.

You're not getting oxygen to the tissue, and then the tissue dies.

And if your retina is dead, you can't see.

So it gets pretty complicated, but it's a big part of what we do. Very complicated, but also, in a way, very simple in terms of the cause. Right. We know this diet that's really high in saturated fat and cholesterol is contributing to so many problems in the body that are related to blood flow or restricted blood flow, lack of blood flow, plaque building up.

And yeah, that manifesting in different parts, right? In your eyes, in your ears, where you're starting to lose hearing, erectile dysfunction. So, okay. I'd love to ask you about

different eye symptoms.

For example,

floaters. Sometimes people get floaters in their eyes. What is that? So, floaters is a common thing inside the eye. There's a gel Called the vitreous humor. It takes up the vast majority of the shape of the eyeball. It's mostly water, like 99% water, and then about 1% collagen. But as you get older, the collagen starts to degrade and pull away and kind of collapse on itself.

And so chunks of the collagen kind of bind together like little protein bindings, and then they remain, and they float inside kind of this jelly. And if you look left and right, you'll see these little spots drift around.

Usually the slow development of floaters just occurs over your lifetime, so it's not a major concern. People who are really near sighted, like myself, I'm a strong prescription. I'm almost a negative six for myopia. And

that means usually people will get floaters at an earlier age. So I've had mine since I was in my early 20s. It's not a huge concern unless somebody's having

sudden development of floaters. Like, all of a sudden you're seeing 20, 3100 little black spots in your vision, or you see a flash of light associated with that or certainly any vision loss. And that's because the gel is physically attached to the retina in the back of the eye.

And if you're seeing that flash of light and those little floaters, it could be that the gel has separated from the retina. And when the gel separates and peels off, kind of like you're peeling like old wallpaper off of the wall, the gel can tug on the retina and create little holes and tears.

And when that happens, your brain doesn't know what that physical kind of excitement of the retina is. So you perceive it as a flash of light, like a lightning bolt. And so if anyone's having that, if you're listening to this, you've had it recently, and you haven't seen a doctor yet, that's one of those moments where you don't want to wait, you don't want to think, oh, it'll get better on its own.

No. The sooner you get it looked at, if it happens to be a tear, a hole, or detachment forming where the retina is coming off the back of the eye, the sooner you get it treated, the better, because some people can lose vision from that. Yeah, I had a buddy that had a detached retina just randomly

in his 40s, just out of nowhere, but they did address it right away. And as far as I know, his eyesight is good. I know it took a while to kind of rehab his eye after surgery, but with a retinal detachment, if he had a full detachment, like, if they catch it early and such tear, they can use laser.

I don't think it was full. Maybe partial or something. Maybe a partial. If it's really small, like, they catch it soon, like there's a small tear, they can use a laser to basically burn a hole almost around the tear, and then it's not as big of a deal. But if it's a full detachment forming, your surgeon will do what's called a sclero buckle, which is literally a silicone ring that they loop around the eyeball like you're squeezing a grape around it.

Like, imagine squeezing a grape, and it makes the eyeball a little bit more elongated.

That's an invasive procedure that will change the physiology of the eyeball a little bit. So it's going to change your prescription, and it takes a lot longer time to heal, recover, and may have a significant impact on your vision throughout the rest of your lifetime.

I'm just laughing because I'm wondering if anybody else is starting to feel a little squeamish talking about, like, slicing and squeezing eyeballs okay

besides me. All right,

do you have any experience with patients that you've helped change their diet and had improvements to vision? Whether it's cat? Racks or other eye problems?

Short answer is yes. I've had some patients, specifically, I had a patient who she developed a condition called uvitis. Now, there's several different types of uvitis. This is the term we use for a really intense inflammation of the eyeball. There's a certain structure of the eye called the UVA eye, and this is a painful inflammation of the whole eye.

It causes

white blood cells to leak inside of the eye so eye doctors can see it. Imagine looking inside of an eye and you can see like a snow globe. Like, you can see these white flecks spinning inside the eye. And her vision was blurry. And she had been suffering for this for years.

And the doctors who had seen her before had never run blood tests. Well, I ordered some blood tests that we know that these conditions are associated with, and she ended up having inflammatory bowel disease. And that is strongly connected with the eye.

Wow, that's interesting. Yeah. There's even what's called the newer term I've seen in the last some publications is the gut retinal axis, I think is the term that I've seen.

And that's because there's inflammatory conditions that affect your gut, also somehow affect the eye. They don't fully understand it. In fact, the research in the gut microbiome and its reflection on inflammation and retinal disease is quite fascinating.

But for this one patient, she had inflammatory bowel disease, so we discovered it, and I, of course, referred her to a Rheumatologist and discuss more on figuring out if there's anything else going on in her body. But we talked about just food sensitivities and what diets she's ate, and

we ended up just having that conversation. And I just told her my story. I didn't tell her, hey, you should try this. I just said, hey, this is what I've done in the last few years and how diet affected me because I've had GI issues. And she ended up kind of pursuing down that path and I ended

up seeing her for multiple years later.

And she just continually just loved it. And she even brought her boyfriend in and got him to change to being more like a plant based lifestyle. And,

yeah, they both had just noted great health outcomes and changes.

It's funny that you mentioned cataracts. Cataracts does have good research as more vegetarian,

antioxidant rich diets have reduced risk of cataract development. However, I've only been practicing for like eight years, so I can't really see the longevity effect of people having that, other than just anecdotal reports of patients who are still like, in their eighty s. And I'm like. Barely have any cataracts, and it's because they're just eating healthy and living a good lifestyle.

Yeah, that's great. What about

being out in the sun and cataracts and vision?

I've heard

mixed messages about that. Sure. So right now, for the most part, sunlight exposure does contribute to some level of cataracts. There's different types of cataracts. And one specific cataract called a cortical cataract, is more strongly associated with UV light exposure. The vast majority of UV light that hits your eye if you're not wearing sunglasses does get absorbed by the cornea, the front window to the eye.

But that's why people who weld will get flashburns on the eye or photocaratitis, they literally get sunburn on the eye.

And that's just because the cornea absorbs all that UV light. Now, that small one to 2% of UV that passes through the cornea, then that hits the lens before it even hits the retina in the back of the eye. And so that has been found in epidemiological studies

and even in other anecdotal unique studies. So, like glass blowers. Have a glass blowers. Cataract exfoliative cataracts.

And so

there is some evidence that, yes, UV light can help advance the development of cataracts. But UV light also affects your eyelids. It increases the risk of wrinkles and other skin conditions. So I always encourage people wide brim hat, sunglasses, sunscreen, all of the above. Got it. So what are some of the myths out there,

the big eye myths that you are constantly combating?

Yeah, you kind of mentioned the one earlier about that glasses will deteriorate your vision. So that's one. One of the biggest ones that always gets every eye doctor to kind of literally roll their eyes

is that you can somehow reverse the need for glasses, especially through eye muscle exercises. Eye muscle exercises are studied and have some really good evidence for a few binocular vision disorders, most notably convergence, insufficiency, accommodative insufficiency. These are people who can't control their eye movements very well, they have poor coordination, and that vision rehabilitation.

These exercises are part of vision rehabilitation and even used after traumatic brain injury. People's in a car accident, it can help them recover quite rapidly.

But the use of eye muscle exercises to somehow

change your need for glasses.

There's anecdotal reports, but those people there's no good scientific evidence to really support it. And I think the people who do come out because you can look online for anything you want now you'll find anecdotal reports people saying that they somehow reversed their need for glasses by, like, two diopters.

Well, it's more likely that if that happened, that there was an issue beforehand, and because they weren't in a clinical setting, they weren't able to really come up with a more realistic answer of why that occurred. Like, they were maybe given too powerful of glasses beforehand for some time.

Maybe they weren't dilated during their eye examination.

Maybe there is some undiagnosed binocular vision disorder. So unfortunately, that's a big myth, and there's just no evidence to support that. You can reverse the need for glasses through eye muscle exercises at this point. Yeah, it makes sense. Right. You need a study of people doing the exercises with vision impairment, and it would not be hard to measure, that's for sure.

There's theories going on for the last almost 150 years.

Every 1020 years, there's a new theory that bubbles up, but

it never really lives through the litmus test of actual, validated and scientific literature. Yeah. In terms of the things you could study, that would be one that would not be hard to study

if you conducted the study properly. It's pretty easy to tell if people can see or not and if their vision improves, like if they can read the letters on the card or not. Right. Yeah. Well, is it more plausible that

a person with impaired vision, some level of impaired vision could improve it? Let's say they're overweight, they're obese, they have heart disease, they have all these medical issues. Right. And they resolve those issues. Is it plausible that eyesight can improve as those issues are resolved? Yeah. With those specific eye diseases, then yes, they can have some benefits.

Now, if there's permanent damage to the retina that's done, like they had a stroke, a vein occlusion of some kind, and the retina is dead, then unfortunately, it's unlikely for that to come back. But in many cases so people who are diabetic and they have bleeding in the back of the eye, they have inflammation.

There are plenty of studies and evidence to suggest hey. That if you tighten up your blood sugar, if you can change, if you can lose weight,

the retina can heal itself, and you can reverse the signs of diabetic retinopathy. It doesn't happen very often

just because it's difficult for a lot of people if. They've been diabetic for many years. And I think it's a failure. In our healthcare system,

we don't have people really

giving the proper education of how they can change their lifestyle. But I think of the that's correct. The healthcare system does not empower people to heal. It basically sets them up to perpetuate victimhood. It's like you have all these diseases, here's some drugs,

best of luck to you. And they're not getting any kind of encouragement or hope or inspiration or practical action steps to change their life. Right.

I know this is plant based. I still eat in the above 90% all plant based things. And I try to push myself to be way more green eating a lot of leafy greens. I know in the research around some animal sources that can be beneficial for the eyes is mainly eating fish

for the omega three S, I'm assuming. Yeah, because of specifically DHA in the omega three world. Right. There's different components of omega three. EPA is just a little bit stronger with skin benefits and even dry eye. But with the retina in the back of the eye, about 60 70% of the photoreceptors in your retina are made up of DHA and have

of the oil content, of the phospholipid content of those receptors are DHA. And so there is some

dietary research that showed that individuals who ate one to two servings of fish on a weekly basis who are diabetic had less chances of diabetic retinopathy, less severity of diabetic retinopathy. And there's some benefits for macular degeneration as well, mainly because it's believed to reduce inflammatory and oxidative processes.

But you could also get omega three S from algae sources. That's where fish even get it. So there's other aspects that's interesting because usually in the omega three conversation, it's mainly people talking about brain health. Omega three S for your brain, the DHA and EPA, and sometimes just the anti inflammatory nature of omega three S is part of the conversation.

But I've never heard anyone talk about the eyes and eye health because of DHA. So that's brand new information. For me. The retina is an extension of your brain. It is neurological tissue. So when people talk about the benefits for DHA for the brain, then they're talking about the same thing.

And now for children, because eye development is so important for prenatal children, a lot of prenatal eye elements include DHA in there as well. And that's for that same thing. Yes,

I interviewed Dr. Michael Donaldson. Actually, I posted that interview today, but he's with Halle Acres and he's done, I don't know, for several decades research on the raw food diet and juicing. And they recently changed their recommendations. They were predominantly all raw plant based, or about 85% raw, 100% plant based diet and lifestyle program.

But after doing a number of studies, he realized we need to incorporate fish oil for the DHA, because what he found was comparing

flax oil and different plant based sources, omega three S. The humans in his studies were not absorbing the DHA. They just weren't getting it. Their levels were not anywhere near

what he saw. If they just supplemented with fish oil so that kind of goes back to your study about the fish consumers and diabetic retinopathy. Yeah, I can see that there's connection there. It's interesting. What I find interesting reading into the research first, I'm definitely going to listen to that interview that you did because I always find that fascinating.

Also, it sounds like they're doing a good job in that they're looking at the research and they're admitting, hey, we've found something we need to change. I think that's being responsible with a lot of the research in eye care

and I think with all health care the dietary sources infer in terms of like you're eating it versus supplementation because there's research articles that show dietary sources of fish have these benefits, but then they show supplementation sources of like omega three s or other vitamins. They don't have the same benefit.

And so that's why I always encourage people like, hey, yeah, if you're not a vegetable person, you can go the supplementation route, but it's probably not going to be as effective. In fact, scientific evidence will suggest it's not as effective as just consuming it from the source. And so I do encourage people, yeah, supplements have a role, especially in certain conditions, but

I think it's better health and better for your money to just eat the good food, eat real food. I understand that. So I always encourage that anytime you're dealing with supplements, you've got sourcing issues processing, you've got availability,

bioavailability issues. Are you absorbing them? Yeah, there's a lot of potential

hazards, or just let's just call them issues with supplements

not serving you as well as a whole food would. And again, to kind of tie it back to that, the research on the microbiome and its relationship to the eye, I'm really fascinated with. So I've been reading more into it, and they even had to some conclusion.

And one that I was reading just this morning,

that because of the microbiome is different for people who've eaten a high fat diet. That may be a reason why some research studies using supplements show really inconclusive results, because people, just their way, their gut is managing the absorpt of these supplements is kind of all over the place.

And that was specifically a study done in mice, which was really fascinating. They took mice of like 60% fat diet versus a 70% fat saturated fat diet and watched their inflammatory markers and their diabetic retinopathy change. Really fascinating stuff. I can send it to you if you'd like. Yeah, I can geek out on some nutritional science studies for sure.

Okay, well, we're coming up here on an hour, and I want to be respectful of your time. Is there anything else that you find or have found or learned about either the eye or nutrition for eye health or in the mythological space that you want to talk about, you want to share with people that you feel like they don't know, they haven't heard?

I think probably

the retina is one of the most highly metabolic tissues in your body, and it's constantly having to basically heal itself, like the light energy that you're seeing just to see any second of the day. The retinal photoreceptors are basically getting used up. And so then your body needs to regenerate new photoreceptors.

Like every microsecond it's doing this. And so

that results in a lot of oxidative species, reactive oxidative species. So basically it ages it really fast. So it needs nutrition, it needs antioxidants in order to function at its best. And so I just encourage people, I imagine people who are listening to this, if you haven't thought about just incorporating more vitamins, not just supplements, but like eating more nutritionally, that is really, I think, kind of the core fundamental thing.

It's just you need to eat better because it's going to really protect your eyes. And so I strongly encourage that for everybody. Yeah. Eating that broad spectrum of fruits and vegetables, getting all the vitamins, minerals, enzymes, antioxidants, all these wonderful phytonutrients that you get from plant food, anthocyanins from berries, betacarotene.

Should we mention carrots? And the carrots improve your night vision? Is that true? I don't know. Yeah, that's a good another myth. Carrots do have benefit for the eye. Ah, betacarotene. Your body absorbs that and then turns that into vitamin. And your retina uses vitamin A extensively, especially for its ability to see and absorb light, especially for night vision.

Carrots have a benefit over animal sources of vitamin A. People who eat liver and other animal, animal muscle tissue

because carrots have antioxidants, zazanthin, lutein, these are carotenoids that are found 1000 times more concentrated within the eye than anywhere else in the body. And they basically protect the eyes from harsh light and work as antioxidants.

But most people, as long as you're eating a well balanced diet, you're not calorie deficient. Most people never have vitamin A deficiency. I've heard some doctors say that vitamin A deficiency is the cause of dry eye. And it's like it can, but you're probably going to be going blind before that happens anyway.

And in the Western world, the only time we see vitamin A deficiency are in people who have absorption issues in their stomach. Because if they had maybe stomach cancer or they had gastric bypass surgery and they're not eating enough and they're not taking supplements. Yeah,

carrots do have the benefit as protecting just as a healthy food, as an antioxidant for the whole body. Yeah, that makes sense. So are leafy greens, the number one eye health vegetable over the carrot.

I like to joke that Popeye had it knew better than Bugs Bunny eating spinach, kale, green leafies. That's because of lutein. Zazanthine are so protective for the back of the eye, as well as the nitric oxide benefit of eating green leafy vegetables. And that can help with glaucoma. And again, the blood vessels just being responding better, dilating better.

That's awesome. And folks, look, the truth is simple. It's not complicated. It's just not. When you eat a diet that's rich in fruits and vegetables, whole plant foods, you're supplying your body with

all these wonderful nutrients that help you heal, that serve your cells, that neutralize harmful free radicals from just normal cellular process.

Just eat the food,

right? Eat the food and get your eyes. How often should a person get an eye exam? Thanks for asking that. There's actually new recommendations that will be coming out by the American Optometric Association. I don't know if I can really say that just yet, but it's going to be coming out.

They've did a multidisciplinary

kind of look at what the recommendations should be from multiple facets of healthcare and it's agreed that it should be an annual eye exam whether you have vision issues or not. Because we can catch so many. Different systemic diseases from just properly looking inside the eye and evaluating the vision system.

See, and that's a big takeaway for me right there. Big takeaway because I never get my eyes checked because I've had my vision is good, right? I mean, it's only till recently that, like I said earlier, like, I'm having trouble with the tiniest fine print, and I still don't even feel compelled, like, yeah, I know about.

But after talking to you and realizing, oh, wow, they can see all kinds of other problems in the body through the eye, that is something I never occurred to me and I've never heard anyone talk about. I think that's a really big takeaway from this interview is getting eye exams not just for your eyes, even if you feel like you can see good.

Right? See, well,

right? Is let them just take a look.

I guess the last question related to that is, can you give me a list of the potential body problems, health problems, chronic illness problems that can be early detected from an eye exam? Yeah, there's quite a bit, but off the top of my head, certainly easiest one is diabetes, high blood pressure, high cholesterol.

We can see that even on the front surface of the eye for people who are developing high cholesterol levels, a lot of neurological problems. Certainly we catch brain tumors, multiple sclerosis. Wait, you said brain tumors? Yeah. How? Because brain tumors will push if they hit the visual cortex in the back of the brain, it'll show up visually in your eyesight in distinct patterns.

And tumors can also push on the optic nerve track. And so when looking at the optic nerve

under the microscope, we can see pallor and sometimes even inflammation. And that'll tell us give us a hint that, hey, this person's got neurological conditions plus the eye muscles. Like, I had a young kid who was six years old and was kind of struggling in school, wasn't really reading correctly.

And just during the examination, I was checking her eye muscles, and her muscles were not working correctly. They were all over the place in weird ways

that I just knew I'm like, something's not right. It was tough to talk to the mom, but I'm like, we have to do a brain scan just to make sure it's okay. And sure enough, she ended up having, like, a mid brain tumor. So you can catch that anemia.

I caught a early 20 year old female, came from college just to update her contact lenses. Had no other problem. But she had a specific type of blood, what's called a Roth spot. It's a certain type of bleeding in the back of the eye, which usually I only see in patients who are severely diabetic or maybe they have a history of HIV.

And so for a young female, healthy, no other problems, I'm like, this is not right. We're going to order blood work, which she ended up going. She neglected to get the blood work. And then a few days later, she finally felt ill and went in and they tested her blood and she had an immune thrombocytic perpura.

Basically, her immune system was attacking her platelets and she almost bled to death. They're in the hospital, so they had to admit her for almost a week. Thankfully, she'd brought the notes that I had sent with her in the referral. Um, so that's another condition, inflammatory conditions like arthritis,

HLAB 27, associated inflammatory issues, back issues. There's a lot of just interesting things that show up and hit the eye that you would never think that would be gotten an eye exam. Yeah. You're blowing my mind right now. Seriously, that's amazing. You know how you have nevi in your skin, like moles?

Yeah. So

they're similar name, but they're not exactly genetically linked or they're not really the same family. But you can get a mole in the back of your eye that we call a choroidal nevi. In fact, I have one in my left eye, and we have to watch those because they can grow.

And if they show signs of growth, they could become a melanoma, and those can spread. The most likely place for those to spread is your liver. And if it hits the liver, it's like a 99% mortality within five years. So we have to take that very seriously. So I get my eyes checked, like, twice a year just so that they can keep watching that.

So, yeah, there's a lot of stuff, folks, that is some fascinating stuff we have just learned.

I'm going to go get an eye exam now because I hope it's great. I hope they're like, wow, you have the healthiest retina we've seen in years.

I hope that, too. Yeah. And I'm curious what they will say about

what my vision is, because it's clearly no longer 2020, right? It's whatever, it's something different. But yeah, this has been really fun, really interesting.

Thank you so much for your time. Anytime. Thanks, Chris. I appreciate yeah, yeah, this has been really good. And so, again, where can people find you? I know you got a big following on YouTube. I imagine you might be on Instagram and some other channels, too, so I want to make sure folks can connect with you and learn more.

Thank you. Yeah, I use the handle Dr. Ihealth, and I use that certainly here, like on YouTube, on Instagram. I even have a TikTok now for as much as that is on LinkedIn. I go by my full name, Joseph Allen, when it's got OD and all these extra FAAO letters and stuff after it.

But you can find me on all those different channels, and please reach out and thank you. Got it. Dr. Ihealth, that's his social media handle. Easy to find. And your website, same thing, doc.

And you do spell out doctor. Doctor. And the reason I even came up with that name is because I wanted people to know, hey, I'm a doctor. It's about the eyes. It's about keeping them healthy. There we go. Easy to remember. It's good. All right. Well, thanks again, Dr.

Joseph Allen. Great to have you. Great to connect. Awesome information, folks. Thanks for watching and listening thing. Please share this video with people you care about. Hey, it sounds like everybody you know needs an eye exam, right? It's crazy how many different diseases or chronic conditions can be diagnosed or not pre diagnosed, but early warning signs can be detected before something manifests into something much more serious or life threatening.

So, yeah, wow, you're on the front lines, and that's amazing. Um, more people need to know about that. So anyway, help us share this video. Help us get this word out and this message out

and about the power of the plant based diet. So thanks for watching, everybody. I'll see you on the next one.