

- Dr. Drew Sinatra: Eye health it impacts all of us. Your eye is connected to all the systems in your body, and therefore, your overall health.
- Dr. Steve Sinatra: And we're putting more and more strain on our vision with all the screens we spend so much time looking at.
- Dr. Drew Sinatra: Today we're joined by Dr. Rani Banik. She's a neuro-ophthalmologist who specializes in treating headaches and migraines. She also uses a functional medicine approach in treating her patients.
- Dr. Steve Sinatra: We'll be discussing the eye-brain connection, how to best protect your eye health, what leads to cataracts and macular degeneration as you age, and how you can combat those effects.
- Dr. Drew Sinatra: All this and more on today's **Be HEALTHistic**.
- Narrator: Welcome to **Be HEALTHistic**, the podcast that's more than just health and wellness information — it's here to help you explore your options across traditional and natural medicine, so that you can make informed decisions for you and your family. This podcast illuminates the whole story about holistic health by providing access to the expertise of Drs. Steve and Drew Sinatra, who together have decades of integrative health experience. **Be HEALTHistic** is powered by our friends at Healthy Directions. Now, let's join our hosts.
- Dr. Drew Sinatra: Hi folks...if you like what you hear today and you want to listen to future conversations on all things integrative and holistic health, subscribe to our podcast at **BeHealthisticPodcast.com**. Also, check out and subscribe to the Healthy Directions YouTube channel, which features video versions of our episodes, plus extra videos you won't want to miss. And finally, we have more with me, Dr. Drew Sinatra, my dad, Dr. Steve Sinatra, and other health experts at HealthyDirections.com.
- Dr. Drew Sinatra: Hey everyone, welcome to another episode of **Be HEALTHistic**. Today on the show we're welcoming Dr. Rani Banik, a board-certified ophthalmologist, fellowship-trained neuro-ophthalmologist, and functional medicine expert. Dr. Banik manages a wide spectrum of conditions affecting vision, as well as the complex connections between the eye and the brain. With her functional medicine approach, she applies principles of alternative medicine with more traditional medical approaches to develop personalized treatment and wellness plans for her patients.
- Dr. Drew Sinatra: We're going to ask her all about eye health and vision preservation as we age, and are also going to discuss her new eBook on macular degeneration.



Incidentally, my dad just had eye surgery himself, so I know he'll have some questions for you, too. Thanks for joining us today, Dr. Banik, welcome to the podcast.

Dr. Rudrani Banik: Thank you so much for having me.

Dr. Drew Sinatra: Well, you've got lots of different credentials behind you. I'm curious if you could share with us and our listeners, number one, why you got into ophthalmology and number two, why did you begin to incorporate and integrate functional medicine into that practice?

Dr. Rudrani Banik: Yeah, absolutely. First of all, the eye, even though it's just a small organ, it's a very complex organ — and it's intricately connected with everything else in the body. Eye health is just so important, and it really drew me in when I was in medical school, the complexity — and the ability to do, for example, a cataract surgery and to restore someone's vision, be able to allow them to function again. For example, if somebody has a cataract, they may not be able to read or drive. And just to restore that, that beautiful gift of sight, was really what drew me in.

- Dr. Rudrani Banik: But I love all things about eyes, not just cataracts. Then I decided to actually do a fellowship in neuro-ophthalmology, because the eye is also very intimately connected with the brain, and the pathways are just really incredible. And it's almost like going down solving a mystery as you're trying to figure out what's going on with the patient, if they do have a neuro-ophthalmic problem. So it's intellectually stimulating, it's very rewarding, as well.
- Dr. Drew Sinatra: And the functional medicine piece, was there a part of your life, or a story, or a health issue that you had that, sort of, brought you to functional medicine?
- Dr. Rudrani Banik: Yes, absolutely. So, first of all, I never even knew what functional medicine was until about six or seven years ago. During my medical school training, it was never brought up. Integrative, functional medicine never discussed. And so what ended up happening was I myself suffer from migraines, and I was really in bad shape for a while. I was getting migraines every day, and I tried pretty much every pharmaceutical agent on the market, nothing was working. It was making me feel like I couldn't function, I was like a zombie. And I said, "There has to be a better way to help me deal with my migraines."
- Dr. Rudrani Banik: And I started to do research in other ways to treat migraines. And what I realized, what I discovered was that there are supplements that have been shown in clinical trials to help with migraines. Nutrition is such a key factor in management of migraines and none of my migraine doctors had ever asked



me about any of that. You know like, what am I eating? What am I drinking? How much caffeine do I have? How much do I sleep? How is my stress? None of them had once asked me about all of those lifestyle factors that were contributing to my migraine.

- Dr. Rudrani Banik: So once I started to address those factors, I started to feel better and get off of my medications. And it really introduced me to the world of functional medicine. I was so convinced, I mean, just this miraculous change in my life, I started using some of these strategies for my patients. And I decided to actually get certified in functional medicine. So, it's been a journey still working, seeing my patients and so forth but taking classes. And I'm about to take the certification exam later this year, so I will be fully certified in functional medicine.
- Dr. Rudrani Banik: And I love bringing that approach to my patients, because as I mentioned before, the eye is not isolated. It's very closely interconnected with the whole body. For example, not just our nervous system — our digestive system, our cardiovascular system, our immune system. And to be able to bring everything together using a more holistic approach, it's really necessary. And I think my patients really appreciate that, knowing that I'm not just treating their eyes, I'm treating their whole body when I see them.
- Dr. Steve Sinatra: So Drew, I just want to jump in here. I'm really intrigued by your story because as a heart specialist, I treated a lot of heart patients with magnesium, Coenzyme Q10...and many of those patients had migraine, as well. And I was amazed, I was absolutely amazed — when I was treating heart failure or hypertension or arrhythmia — when my migraine patients would come back and say, "Doctor, you fixed my migraine." And I didn't know about it, because this was like 20 years ago, 25 years ago, and then I went to the literature. And then again, these papers that came out on CoQ10 and magnesium, blood levels tend to drop where patients can develop migraine, because of the dropping blood levels. So I was wondering what your experience was, I mean, what type of functional medicines did you use for your migraine?
- Dr. Rudrani Banik: So, magnesium was key and the formulation of magnesium is really important. So there are magnesium salts, and then there are the chelated forms. And I found that the chelated forms, like glycinate or L-Threonate, tend to work best for migraine, simply because they cross the blood-brain barrier. I also use Coenzyme Q10. Riboflavin is actually another one. So vitamin B2, in high doses up to 400 milligrams a day, which is much more than your regular supplement would have, but it is available from certain manufacturers. Really, it's been shown to really benefit. And then other things like melatonin, feverfew, and butterbur.



Dr. Rudrani Banik: So those are, kind of, my go-to supplements for migraine. But for me, personally, it really had to do with diet, as well. I was basically surviving off of junk food most of my medical school years, and even into residency and working. I was living off of...this is crazy, I was living off of pizza, ice cream and soda. And not once did any of my doctors asked me about what I was eating. And I was having caffeine...I was having between eight to 12 caffeinated beverages a day, and not once did I think, "Maybe my caffeine is contributing to my migraines." So it was really like an epiphany when I realized this, and when I tell my patients, sometimes you can see that light bulb go off in their minds, as well. Like, "Oh my God, maybe if I change this one little thing in my lifestyle, my nutrition choices, it can make a big difference." And it does, it's really miraculous.

- Dr. Steve Sinatra: Very well said. And Drew, while I'm on it, on the eye there was a review article that came out on Coenzyme Q10 in November, just a few months ago, a wide review article. And it's amazing that...in my family, I have macular degeneration and glaucoma. Both my mother and my grandmother went blind from a combination of glaucoma and macular degeneration. And I was amazed to see in this article...and I didn't even know it, I just learned about this, and I have been using Coenzyme Q10 for 40 years. I mean, I didn't know this.
- Dr. Steve Sinatra: So when I looked at this review article, because I was giving a lecture for the A4M (American Academy of Anti-Aging Medicine) online, I came across where they're using Coenzyme Q10 in glaucoma. It's just amazing, I didn't even know about this. So even at my age, and my expertise on CoQ10 because I read everything on CoQ10, I must've missed this one paper. But again, it rescues, I guess, the retinal cells that are adjacent or in the ganglions of the retinal nerve. So I'm just amazed at what Coenzyme Q10 does. I mean, even in my career, because I've been using it for about 40 years now.
- Dr. Rudrani Banik: I know, it's really incredible, the benefits of some of these supplements and nutrients on our eyes. So the eye is a very metabolically active organ; per body weight, I guess, it's one of the most metabolically active organs in the body. And so, constant supply of Coenzyme Q10, antioxidants, other vitamins to support mitochondrial function and to prevent oxidative stress are key. I love that you brought up Coenzyme Q10, because it is so important to keep our retinas healthy. And also for our optic nerves, as well, to keep the optic nerve functioning well. Yeah, really important.
- Dr. Steve Sinatra: While we're on supplements for the eye, because for years I've been using supplements. I'm a cath-cardiologist, I've done thousands and thousands of angiograms, and emergency pacemakers, and all that stuff in my career and training. And I just came down with cataracts, but I've been using vitamin C for



my lifetime. What's the relationship between...does vitamin C get inside the lens area, where it can help prevent cataract? I read a couple of papers on this years ago, but I was wondering if it made a difference because I just had a cataract operation, and yet my colleagues who were cath-cardiologists seemed to get them a lot earlier than I did. And I was wondering if the vitamin C made a difference.

- Dr. Rudrani Banik: Yeah, so I'll first just explain what a cataract is. So inside our eye, we have a lens that helps us to focus. And when we're younger, the lens tends to be transparent. Imagine like you're looking through a clear window. But as we get older from oxidative stress, and again, that oxidative stress comes in again. If the lens starts to opacify, and basically it allows less light to get in, making our vision blurry. So basically it's like looking through a dirty window.
- Dr. Rudrani Banik: So antioxidants, like vitamin C, vitamin E, vitamin A, are really important to help fight against that oxidative stress. And there are actually numerous studies done in various populations around the world so not just the United States, but also Sweden, some other European countries, Japan where they showed that people who had diets rich in some of these antioxidants, a diet rich in certain fruits and vegetables, had a less incidence of cataract formation or need for cataract surgery. Yeah, so, really interesting. And these antioxidants do get into the eye, they do get absorbed into the eyes. So, super important.
- Dr. Drew Sinatra: For someone like myself, who...my father mentioned our family history, his mother, his grandmother, had macular degeneration and went blind, and he's got cataracts. I mean, what can I do? I'm 40 years old, I eat a very clean diet, lots of fruits and vegetables, like you just mentioned. You mentioned some of these supplements, as well. Is there anything else that I can do for preventative things to, sort of, minimize the risk of me getting these conditions?
- Dr. Rudrani Banik: Well, you're doing the foundation of what you need to do, which is eating a healthy diet. And what I usually tell my patients is, it's not just carrots that we all need for our eye health. That's true, we do need carrots, but we need the whole spectrum of antioxidants, phytonutrients and minerals, as well. And so they're probably over 20 nutrients our eyes need to stay healthy. And the best way to get that is by eating lots of different plants. So I really advocate for, it doesn't necessarily have to be a plant-based diet, but a plant-rich diet. And what I usually tell my patients is cycle through your fruits and vegetables, don't just eat the same thing every day.
- Dr. Rudrani Banik: And include lots of different colors in your diet. So what I tell my patients is, most people eat three meals a day, so that's 21 meals a week. Have 21 different colors in your diet, so have that rainbow of colors. So have your reds, your



blues, your oranges, your greens, your purples, sometimes even your blacks, and you'll get all those nutrients your eyes need to stay healthy.

Dr. Rudrani Banik: Now another question a lot of people ask me is, especially now, because we're on our screens all the time — what is the potential negative impact of all this screen time and blue light on our eyes? Well, what I can tell you is, first of all, there is no evidence that blue light will permanently do any damage. So fortunately, we don't have to worry about losing vision permanently later on in life. But definitely it can contribute to digital eyestrain. So especially someone like yourself, who's younger — or even children, we're on our screens, how can we protect against digital eyestrain?

- Dr. Rudrani Banik: And one of the best ways is actually nutrients that many people probably haven't heard of, but there are three important eye health nutrients called lutein, zeaxanthin and meso-zeaxanthin. And I like to call them vitamins L, Z and M. Even though they're not technically vitamins, they're eye health nutrients, and these are really potent carotenoids found in our retinas. And what they do is they basically help absorb some of that blue light, as well as UV light, neutralize it, and protect our retinas. So if you're going to do one thing, eat a balanced diet, but also perhaps even to get an extra kind of protection shield for your eyes, perhaps take a supplement with that combination of lutein, zeaxanthin and meso-zeaxanthin. Really important.
- Dr. Drew Sinatra: Dad, are you familiar with that third carotenoid that she mentioned? I had not heard of that before.
- Dr. Steve Sinatra: Meso-zeaxanthin?
- Dr. Rudrani Banik: Yes. Meso-zeaxanthin.
- Dr. Steve Sinatra: No, no.
- Dr. Rudrani Banik: So the body converts lutein into meso-zeaxanthin, because it's not so readily available from foods. It's available in certain types of seafood, for example, some trout, I think shrimp and krill have meso-zeaxanthin, but it's very, very small amounts. So the best thing to do is have lots of lutein in your diet, but also perhaps take a supplement. There's actually one ingredient that has all three of these in it. And this ingredient is found in many of the supplements on the market — the ingredient is called Lutemax 2020. And what I usually do is...I actually have, I'll just show you here. I have, I don't know if you can see this here.

Dr. Drew Sinatra: Oh sure...yep, okay.



- Dr. Rudrani Banik: So if you look at the label on the back when you're choosing an eye health supplement, look at the label, you'll see lots of ingredients, but look for Lutemax 2020. Because again, that's the ingredient that has all three of those important macular carotenoids. And the reason why that "meso" is so important, the meso-zeaxanthin, is because it's right in the center of our retina. It's what gives us our sharpest vision, we need to protect that area the most, and that meso-zeaxanthin is located right there in the center.
- Dr. Steve Sinatra: Now, how do you feel about astaxanthin? Have you come across that?
- Dr. Rudrani Banik: Absolutely. I'm so glad you mentioned that because astaxanthin, even though it's not found in the eye, it's not located in the retina, there are many studies that have shown that astaxanthin...some people even call it, like, the king of antioxidants. It is so potent and it does get into the eye. There are some studies that have shown that, for example, people who've had cataract surgery, the astaxanthin actually helps to decrease inflammation postoperatively, and it also helps with blood flow to the eye blood flow to the choroid, which is in the back of the eye. So, lots of studies, it's really an exciting nutrient to consider when you're thinking about eye health.
- Dr. Steve Sinatra: Oh great. It's amazing, I learned about astaxanthin about 25 years ago. I was given a lecture in Japan on metabolic cardiology, using Coenzyme Q10 and ribose magnesium. I was at a fair, so to speak, and there was a booth on astaxanthin. I had no idea what it was, but as soon as I learned about it, I brought it back to Healthy Directions. It's a terrific carotenoid. And you're right, it is a king of carotenoids, it's absolutely amazing. And it's not only good for the eye, but it's good for the brain, as well, and the heart.
- Dr. Steve Sinatra: When I went to the literature on astaxanthin, 20 years ago there was only a few hundred articles maybe. But now, there's been like 12,000 articles on astaxanthin over the last couple of decades. So it's really an upcoming carotenoid and I agree with you, it is a king of carotenoids. And I'm so glad that we have it in some of our products, I'm really thrilled about it.
- Dr. Rudrani Banik: Yeah. And interestingly, so I just learned about this this week, astaxanthin also can be found in some creams, like topical cream. So for people if they're concerned about getting wrinkles around their eyes, they can put a little astaxanthin serum on to help prevent those skin changes.
- Dr. Drew Sinatra: Wonderful, I like that.
- Dr. Steve Sinatra: Yeah, and if you use a Coenzyme Q10 with a cyclodextrin complex, the Japanese have done studies on that particular CoQ10, it softens the crow's feet in the



eyes, especially on women where they've done biopsies. So that's kind of interesting. So an astaxanthin and a CoQ10 with a cyclodextrin complex is sort of a nice, soothing remedy for the eye, for the aging guy. I like that one.

Dr. Rudrani Banik: Yeah, really interesting.

Dr. Drew Sinatra: Well, Dr. Rani, why don't we talk about glaucoma a little bit. Can you tell our listeners what exactly is glaucoma? How does it develop, and are there things to help mitigate it, treat it, and also prevent it from occurring?

- Dr. Rudrani Banik: Yeah, that's a great question. So glaucoma is one of the leading causes of vision loss, along with macular degeneration and cataracts. And what it is, is basically, it's damage to the optic nerve in the back of the eye. And it's not something that happens overnight, usually it happens years to decades it takes for the damage to happen. And what happens is people lose their peripheral vision. So many times they don't even know that they have it, because very gradually their peripheral vision is closing in. And until the late stages, they basically have just a small area of central vision. It's almost like looking through a telescope.
- Dr. Rudrani Banik: And most often in glaucoma, the eye pressure is elevated and that's what's causing the damage to the optic nerve. And there are many different types of glaucoma there's open-angle glaucoma, closed-angle glaucoma. But glaucoma, really, it's really believed that the root cause of glaucoma is not just the eye pressure, but it's oxidative stress in the eye that leads to the eye pressure being elevated.
- Dr. Rudrani Banik: So my approach is, again, to use all of those great antioxidants we've been talking about and also lifestyle, reducing stress, meditation. It's really interesting, there are some recent studies that were published about the benefits of meditation for patients with glaucoma, helping to lower their eye pressure. And interestingly, there are also many studies done with lifestyle. Many people do yoga inverted postures can actually increase the risk of glaucoma, as well. So definitely, if you're doing yoga and you may have a risk for glaucoma, or you've been diagnosed, try to avoid those inversions and perhaps do other types of postures.
- Dr. Steve Sinatra: It's an interesting point because, Drew, when I was teaching yoga down at Sivananda, and I was giving lectures down there. One of the lectures I gave was on what yoga does to cardiac arrhythmias, atrial fibrillation, hypertension, etc. And Dr. Rani is absolutely right, because some of those postures would increase blood pressure. If you have high blood pressure, there's certain postures you need to avoid — like Warrior II, for example.



Dr. Steve Sinatra:	It's kind of interesting because one of the things about yoga is — when you're ever doing a twist, and if you have hypertension and you're doing a twist, where you're a little bit uncomfortable and you're holding your breath, or doing a Valsalva at the same time, the blood pressure goes way up. So in anybody doing yoga, Drew, who is hypertensive, they must breathe out. They have to breathe out on any twist or any posture where there's a little bit of tension. Because if they hold breath and they have a history of hypertension, that's when cardiac events, or CBAs, or certain situations can occur. And they have happened during practicing yoga, as well. So I'm really glad you brought that upit was like déjà vu for me, when I was teaching that town in Nassau.
Dr. Rudrani Banik:	No, I didn't know about the twisting and the blood pressure. So I would definitely take that into account.
Dr. Steve Sinatra:	You got to breathe into the twist, because if you don't, the blood pressure can go up. If you're hypertensive — if your normal tensive, it won't make much of a difference.
Dr. Drew Sinatra:	Well, anyone that practices yoga knows that yoga is all about breathing. You are doing stretching exercises, of course, but if you're not breathing during yoga, it's hard, the practice is difficult.
Dr. Drew Sinatra:	Well, I want move on to your new eBook, if we can talk about that a little bit. And the title of that is <i>More Than Meets the Eye</i> — 7 <i>Surprising Strategies to</i> <i>Prevent Vision Loss From Macular Degeneration</i> . So tell us about that.
Dr. Rudrani Banik:	Yeah, so the book is really a cumulation of the past two or three years of my life. What ended up happening was, I've been taking care of patients with macular degeneration for years, for over 20 years. As an ophthalmologist, what we're trained is, tell the patients — eat leafy ingredients, don't smoke, maintain a healthy body weight, exercise regularly, and see your eye doctor once a year. Those are the five things people with macular degeneration are told.
Dr. Rudrani Banik:	But what I realized was that even though I've been counseling my patients about this for years, some of them still progress, and some of them still lose vision, and some of them even go blind. So there must be some pieces of the puzzle that we're missing. And so I started to do some research using my background in functional medicine and integrative health, nutrition, supplements. What else can people do to try to prevent vision loss from macular degeneration?
Dr. Rudrani Banik:	And then the other, kind of, more, I would say, selfish reason for me writing this book is I happened to do genetic testing, home testing with 23andMe, just for



fun. I happened to do it, and I was pretty much negative for everything on their list, except I have the gene for macular degeneration, or one of the genes for macular degeneration. So I said, "Wait a minute, I need to do something. I can't just sit back and be at risk for this and not be proactive about this." So I started to do research and what I found was that, as I was mentioning earlier, we need not just the macular carotenoids for eye health, we don't just need antioxidants. There are over 20 nutrients that our eyes need to prevent that oxidative stress, mitochondrial dysfunction, and inflammation — which is actually the driver of macular degeneration.

- Dr. Rudrani Banik: So I put together a protocol, a nutritional protocol, to try to support eye health, support retinal health. And then in addition to that, in my book I talk about other things that people may not really think about when it comes to macular degeneration. For example, gut health. Now, many people don't realize that there is a gut-eye connection. People have heard perhaps of leaky gut syndrome, inflammation of the gut, the gut microbiome but there's really interesting emerging research being done on gut health and it's link to macular degeneration.
- Dr. Rudrani Banik: So there's some early work showing that certain types of gut dysbiosis can increase the risk of vision loss from a type of macular degeneration that's called wet macular degeneration. I like to call it leaky eye syndrome, so similar to leaky gut, leaky eye syndrome. Anyway, my book addresses what I think are the seven key strategies to prevent macular degeneration. So nutrition, lifestyle, gut health, foods to avoid, supplements, stressors, and there's a couple of other things in there, as well.
- Dr. Steve Sinatra: What were your foods to avoid? I'm kind of curious.
- Dr. Rudrani Banik: Yeah, so I'm sure you've both heard of the SAD diet, the standard American diet. So there was a really interesting study done out of Massachusetts Eye and Ear, University of Illinois, and then Manhattan Eye and Ear Infirmary a couple of years back that looked at people who had diets high in the SAD diet — meaning processed foods, refined carbohydrates, unhealthy Omega-6 fats or high levels of unhealthy Omega-6 fats. And they found that those people had a higher risk of vision loss from macular degeneration. So those are the main foods to avoid, really, just for prevention strategies. And unfortunately, many of those foods...people, our society, our culture is really, kind of, geared towards that. So it's kind of difficult to steer people away from those types of foods.

## Dr. Drew Sinatra: Well, speaking of that gut-eye connection, I'm really curious about this, because I do a lot of gut health, of course. In med school, we learned all about Crohn's disease being associated with iritis or uveitis, right? So, I mean, when you have



someone come in with an eye disorder, are you also in most cases treating the gut, as well?

Dr. Rudrani Banik: Yeah, so I'm glad you brought up that connection between inflammatory bowel disease and eye inflammation. Because uveitis, which is kind of the larger term for eye inflammation, is very commonly associated with autoimmune conditions. So not just Crohn's, but other things like lupus and many other inflammatory conditions. So my approach is basically...in the acute phase, patients may require steroids, really just to keep the eye quiet. So absolutely, I do use traditional methods like topical steroids, sometimes even oral steroids. But I also put my patients on a dietary protocol to try to remove pro-inflammatory foods, and try to replace them with anti-inflammatory foods.

- Dr. Rudrani Banik: And then I also sometimes use...I definitely use probiotics, prebiotics to promote gut health. And when patients are on this approach, what they need to realize is that the change is not going to happen overnight. It usually takes a few months, really, for everything to calm down, to settle down for their eye inflammation to improve, but also their gut issues to improve. And I've really had really remarkable successes in my patients who've been able to be compliant with not just the eye protocols with their steroids, but also their dietary protocols.
- Dr. Drew Sinatra: Well, that's great. I'm absolutely supportive of the functional medicine approach there, so that's great. Speaking of foods again, my dad mentioned some foods that should be avoided. What is your take on gluten and its connection to the eye? I'm curious.
- Dr. Rudrani Banik: So if someone has a predisposition to autoimmune disease, whether that be, like we talked about, inflammatory gut bowel disease. I also deal with a lot of patients with multiple sclerosis, autoimmune thyroid disease when the eye gets involved, like, for example, Graves' disease, or Hashimoto's, also Myasthenia gravis. So for all of those types of patients with a predisposition to autoimmune disease, I tell them cut out gluten. Not just gluten, but gluten and dairy. Patients realize once they've removed it, that their inflammation settles down. But also if they happen to have a little bit of it by accident or by mistake, they immediately flare up, and they know that their body is reacting to that particular compound in the food. So they themselves know that it's a no-no, it's best to avoid that.
- Dr. Drew Sinatra: Yeah, that's good to hear coming from you, because I think gluten it's gotten, not a bad rap, per se, but a lot of people will say, "Oh no, that's just a fad. It's just a gluten-free thing, it doesn't really mean much." But no, I'm telling you, and I think you've seen, as well. I mean, it makes a huge difference in those that have an autoimmune disease, giving it up for that matter.



- Dr. Rudrani Banik: Absolutely, yeah. Even though patients may have the autoimmune disease, other things start to clear up, as well. For example, if they've had skin issues, they start to clear up. I mean, it's just for, I think overall health, if one is prone to autoimmune disease, it's best to avoid gluten and dairy.
- Dr. Drew Sinatra:Exactly, exactly. Do you want to mention your other eBooks that you've written,<br/>as well? Because it seems like you've got three or you've written two, and<br/>you've got this new one coming out on macular degeneration.
- Dr. Rudrani Banik: Yeah. So I have one book, 6 Secrets to Eye Health. So in that book, I talk about the importance of management of blood pressure, of getting oxygen to the eye, foods to include, I talk about blue light. So, some of the things we've talked about today, and then the importance of seeing your eye doctor. And then I have another book, 6 Natural Ways to Conquer Your Headaches. And in that book, I talk about some dietary triggers of migraines and what types of foods to avoid, I talk about some of the supplements that we mentioned earlier, magnesium riboflavin, etc. And other lifestyle strategies, for example, having regularity in sleep, in meals and hydration, all of that is really important, as well, to try to avoid migraines — or diminish the frequency and severity of migraines.
- Dr. Drew Sinatra: That's great, that's great. Well, is there anything else that you want to talk about before we move on to our **Wellness Wisdom** segment? Anything else that you want to share with our listeners?
- Dr. Rudrani Banik: So my book, it's called *More Than Meets the Eye 7 Surprising Strategies to Prevent Macular Degeneration*. It will be coming out a little bit later this year, the launch has been a little delayed, but I also will be having an online course as a companion to the book. And in my online course, it'll be four modules where I go into a deep dive in terms of all of these strategies, specific nutritional recommendations. I also have a recipe guide, weekly meal planner, grocery lists.
- Dr. Rudrani Banik: And I also talk about light. And we didn't really talk that much about this, but how best to avoid UV light. A lot of people ask, what type of sunglasses should I get? What type of filter should I get? How to limit blue light exposure to help with not just digital eyestrain, but sleep, as well. And also the beneficial use of red light — red light and infrared light. So there's some early work being done using longer wavelengths of light for eye health, as a potential beneficial therapeutic strategy. So I talk about all of that, in both the book, as well as the course.
- Dr. Drew Sinatra: Well, I'm really curious about this red and near-infrared light piece you just mentioned, because I'm a huge fan of using red and near-infrared lights, the photo biomodulation for mitochondrial support, treating inflammation, treating



pain. When you recommend it, are you suggesting that people look at the red light or have their eyes closed? I'm curious.

Dr. Rudrani Banik: Always with their eyes closed, because the light will penetrate through the eyelids. Specific wavelength is what I recommend, so 670 nanometers. I'm not sure what you prefer in your practice, but for eye health, that's the wavelength that is being studied. Again, there is not that much published yet on it, but there definitely is really some early evidence that suggests that it could be really be beneficial for oxidative conditions like, again, glaucoma and macular degeneration.

Dr. Drew Sinatra: Well, as we wrap up our show today, as always, we're going to share some Wellness Wisdom with our listeners. So Dr. Banik, with all of us, adults and kids alike, we're so much on our screens these days, we mentioned the blue light previously. What is one simple thing that we can do to limit the impact blue light is having on our vision?

Dr. Rudrani Banik: So, get those three macular carotenoids, somehow, whether it's through nutrition, or through a supplement, or both. Because we only have two eyes and they have to last us our lifetimes, especially for young children, their eyes may not be able to filter blue light out as much. So you want to limit that oxidative stress, you want to improve their macular pigment, and prevent some of these eye diseases down the road. So, start early. For example, in our household, we all take an eye health supplement with the Lutemax 2020. My daughter does, as well. Just make it part of your routine. Vision is so precious, you don't want to take any chances with your vision for a lifetime.

- Dr. Steve Sinatra: And you probably eat a lot of yellow fruits with zeaxanthin in it, I'm sure, like mango or papaya or some of those fruits. I mean, don't they contain a lot of zeaxanthin?
- Dr. Rudrani Banik: They do. So yellow fruits and vegetables, and green fruits and vegetables. So for example...
- Dr. Steve Sinatra: Lutein, yeah.
- Dr. Rudrani Banik: Yeah, lutein, zeaxanthin. So corn is actually a great source of zeaxanthin and lutein, also egg yolks. So not just plants, but egg yolks are a wonderful source. It's what gives them their beautiful orangish yellow color, golden color. Those are some great sources. And yellow peppers, orange peppers, those are wonderful sources, as well.
- Dr. Steve Sinatra: Good.



- Dr. Drew Sinatra: One last question regarding screens is it true that the closer you stand or sit to the screen, it's doing damage to the eye? Like when our kids, they all of a sudden are just so close to the screen, you tell them to get back, get back. I mean, is there truth to that?
- Dr. Rudrani Banik: So, not in the sense that it may increase your risk for certain eye diseases that we talked about. But definitely, the rates of myopia have skyrocketed around the world. Especially with children, they should not be doing work this close up for such prolonged periods of time. Always try to get them to sit back. And the key is, this is really interesting, there are some recent studies out of Asia that showed that kids who spend more time outdoors, at least two hours a day outdoors, actually have less rates of myopia and progression of myopia. So another reason for our kids to get out there, be in the sun, play, and stay away from screens, at least for part of the day.
- Dr. Steve Sinatra: And Drew, the Australians also published, just a few years ago that nine to 14year-olds, the concept of digital dementia. When a lot of these kids are working on computers, or cellular phones, or sending messages. It's a digital type of a dementia problem which, again, we have to be really concerned about. Overuse of these gadgets, you know, can be problematic.
- Dr. Rudrani Banik: Yeah, yeah, they're dependent. I mean, they really help our lives, but everything in moderation. So it may be crazy to think, but a couple of years ago there was a survey done, just to ask people about how much screen time they have. And the average adult in the U.S. was spending almost 11 hours a day in front of the screen. That is mind boggling. And that was pre-pandemic. So now you can imagine, with all of us being on Zoom, and e-learning and everything, what those numbers must be. And for children, it was six and a half hours a day on a screen, pre-pandemic. Just crazy.
- Dr. Drew Sinatra: Too much, too much.
- Dr. Rudrani Banik: Too much, yes.
- Dr. Drew Sinatra: Well, Dr. Banik, thank you so much for coming on the show, this was such a great discussion.
- Dr. Rudrani Banik: Thank you, I really enjoyed it. And I learned so much from both of you, thank you so much.
- Dr. Steve Sinatra: Well, we learn too. You know, it's so great to meet a...you are a so highly trained physician, and you're in the best of both worlds. I mean, you're into complimentary medicine and traditional medicine, and it's just a pleasure to



interview somebody like yourself because — I've been around for quite a while and it's just great to interview somebody that is so well-versed like you are. So Drew, this is a great show. And I hope a lot of our listeners listen to it, and I hope people go out and purchase your books. I mean, I'm really interested in your books, and I want to read those books because...

Dr. Drew Sinatra: I'm going to read them, too.

Dr. Rudrani Banik: Thank you, thank you. That's very kind of you.

- Dr. Steve Sinatra: And you're very contemporary, which I like. You're in the zeitgeist of the times, which is really important, especially in this day and age. So this was a pleasure, Drew.
- Dr. Drew Sinatra: That's our show for today, folks. If you have a question or an idea for a show topic, please send us an email or share a post with us on Facebook. And remember, if you liked what you heard today and you want to be an active member of the **Be HEALTHistic** community, subscribe to our podcast at **BeHealthisticPodcast.com**, or on Apple podcasts, or wherever you download your favorites. You can also find more great content and information from us and the Healthy Directions team at HealthyDirections.com.
- Dr. Drew Sinatra: I'm Dr. Drew Sinatra.
- Dr. Steve Sinatra: And I'm Dr. Steve Sinatra.
- Dr. Drew Sinatra: And this is **Be HEALTHistic**.
- Narrator: Thanks for listening to **Be HEALTHistic**, powered by our friends at Healthy Directions, with Drs. Drew and Steve Sinatra. See you next time.