Hadley

Hadley Presents – Everyday Choices That Can Influence the Course of Eye Disease

Presented by Ricky Enger

**Ricky Enger:** You are keeping up with your eye checkup and you're consistent with your medication, but do you ever wonder if there's more that you could be doing at home to ensure the best possible outcome for your eye condition? In this episode, Dr. Sophie Bakri joins us to share lifestyle choices that can help. I'm Ricky Enger, and this is Hadley Presents. Welcome to the show, Dr. Bakri. I'm delighted to have you.

**Dr. Sophie Bakri:** Thank you so much. Thanks for having me.

**Ricky Enger:** Yes, we really appreciate it. I know that a question people often have is surely there's more I could be doing. I feel like some of these things are out of my control, but maybe there are things that I really do have some say in that I could be doing. And before we get into that, I'm wondering if you could just tell us a bit about yourself, your background, what you do.

**Dr. Sophie Bakri:** So, I'm Dr. Sophie Bakri. I'm a retinal surgeon and chair of ophthalmology at Mayo Clinic in Rochester, Minnesota. I've been in practice for about 20 years, and my practice focuses on diseases of the retina, conditions like macular degeneration, diabetic retinopathy, retinal detachments, macular holes, epiretinal membranes, retinal vein, occlusions, and many more. I've been fortunate to care for thousands of patients over the years, and one of the things I've learned is that preserving vision isn't only about treatments or surgeries, it's also about empowering patients to make daily choices that influence the course of their disease. And that's why I'm really excited about today's conversation.

**Ricky Enger:** Absolutely. You are the ideal person for us to be chatting with about this. I know that every disease is unique, but I'm sure that there are probably some things that are just going to be universally helpful for people to do. Can you talk about a few of those and why particularly those things are helpful for eye health?

**Dr. Sophie Bakri:** Yeah, so there are definitely some universal lifestyle approaches and many of them apply not to just ophthalmic disease, but general health as well. I think really the big one, don't smoke. Smoking, doubles or triples the risk of vision loss from macular degeneration and worsens diabetic eye disease. And there have been many population studies such as the Beaver Dam Eye Study and others that have really shown this very clearly. I think the data here is indisputable don't smoke, and also you probably want to avoid secondhand smoke as well. The other thing is thinking about diet. Everybody has a certain number of calories they need or they'll consume, and within that you want to eat a nutrient rich diet. So, in terms of the retina, think about leafy greens, fish high in Omega 3s, and in particular we think about salmon, think about colorful fruits. I always tell my patients, eat the rainbow, the more colors the better. And of course, colorful vegetables as well and have a balanced diet. Think about eggs as well as nuts. If I was to sum it up, I would just say think about a Mediterranean diet. That minimizes meat, minimizes sugars and increases the amount of beans, pulses, vegetables, fruits, and leafy greens. And of course, on the Mediterranean they eat a lot of fish and that's a good thing.

**Ricky Enger:** Yeah, that makes a lot of sense.

**Dr. Sophie Bakri:** The other thing is think about staying active. I know it's harder for people as they get older, but we know that regular aerobic activity improves blood flow, lowers blood pressure and also supports diabetes management. And we know that improved glucose control reduces complications like diabetic retinopathy. And certainly, if mobility is a problem, think about some of the activities, talk to your doctor, physical therapists, could you do something like swimming, for example, and don't underestimate the power of walking daily as well.

**Ricky Enger:** Yeah, that makes a lot of sense. It's not about the specific exercise; it's about the fact that you are active in some way. And actually, that does bring me to another question I had, in particular about glaucoma. I know that the idea is to keep the pressure down. Are there some do's and don'ts with that, whether it's for certain types of exercise that you should or shouldn't do, maybe certain things, like you shouldn't have a lot of caffeine or medications, that kind of thing?

**Dr. Sophie Bakri:** Yeah, so with glaucoma, there are two things with glaucoma. One is intraocular pressure. We talk about keeping the pressure lower, but the other is ensuring that there is good blood flow to the optic nerve as well. So, in terms of exercise, we recommend engaging in moderate aerobic exercise and that really can lower intraocular pressure in the long term. And there have been many articles on that. Now when it comes to some type of exercises like these yoga inversions and headstands, well, they can temporarily raise eye pressure. So again, think about the type of exercise you do if you have glaucoma. And regarding caffeine, it's not a no, just don't drink a lot of caffeine in one sitting because you could get a rise in eye pressure from that.

**Ricky Enger:** What about diabetic retinopathy? And I think you've touched on some of this a bit already, talking about managing that glucose level and managing your flow. Are there some things particular to diabetic retinopathy that we might not see with other conditions that are going to have a big impact?

**Dr. Sophie Bakri:** So, with diabetic retinopathy, that's influenced also by having high blood pressure and cholesterol. So, three things need to be controlled at the same time to lower the risk of progression of diabetic retinopathy. It's definitely a partnership here with your primary care doctor. You need tight blood sugar control, but obviously not so tight that you drop your sugars and that causes problems. But you want to lower the A1C over the long term to reduce the progression of diabetic retinopathy. Also, blood pressure control as well, really, really important as is cholesterol management. And as you know, you can get monitors for blood glucose. You can get these continuous glucose monitors, which I'm seeing more and more of my patients have. They link it to their phone and give them alerts and they like to be able to monitor what they ate and what happened after they ate.

And certainly, many patients have a blood pressure cuff at home and some measure it more than once a day. Cholesterol management can be difficult in some patients, but if you start with diet, certainly a Mediterranean diet as we discussed, that can really help with cholesterol management. But some patients need more, they need statins and other drugs to lower the cholesterol and that actually lowers the cholesterol deposits that we call hard exudates that happen in the macular in diabetic retinopathy. And then again, exercise and smoking. These are just universal things that are good for eyes and good for health.

**Ricky Enger:** Absolutely. So, what about with macular degeneration? I think one of the most common things we hear, there are commercials about it, people come to us and ask about it is a regimen of vitamins that might be particularly helpful for MacD. So, can you speak to that? Is there a regimen that's really helpful or are there some additional things with macular degeneration that people should consider?

**Dr. Sophie Bakri:** I get asked this a lot by patients but also by their families as well. And if you don't have macular degeneration, we just recommend a healthy diet. Now there's a certain level of macular degeneration and that's intermediate age-related macular degeneration where you have drusen in both eyes or if you have advanced macular degeneration, that's the type of patient that could benefit from a special formulation known as the AREDS2 formula. Now AREDS stands for the age-related eye disease study, and that was a very large NIH sponsored clinical trial. It was run by the National Eye Institute, published in 2013, and that was a follow up from the original AREDS trial. So, we now have AREDS and AREDS2. The original AREDS trial showed that there's a certain combination of vitamins and minerals that can slow the progression of intermediate to advanced age-related macular degeneration.

So, talking about this formulation, the original AREDS formula had certain doses of vitamin C, E, beta-carotene, zinc and copper. And then AREDS2 trial modified this because the beta-carotene was found to increase lung cancer risk in smokers and former smokers and the high dose sometimes just caused a tummy upset so that was modified in the 2 formula. Those were removed and lutein xanthin were added. But one of the most common questions I get is, well, shall I continue taking these? Are they working well? They slow down the disease, they don't stop it completely and many patients are on it and then they still get even more advanced macular degeneration and that's tough. But it reduces the progression by about 25% or so over five years but doesn't restore any lost vision, only slowing it some. So, you can still get wet macular degeneration and more advanced disease.

**Ricky Enger:** And what if someone has just been diagnosed with dry macular degeneration and it hasn't really progressed yet? Would you say it's a good idea for them to start at that point or will it really make a difference just once it reaches that intermediate stage?

**Dr. Sophie Bakri:** The studies have shown that for early macular degeneration, that's when you have a few drusen in the retina. It hasn't been shown to help. The biggest benefits really are from the intermediate stage and beyond. So, for the earlier stages, I recommend the multivitamin and healthy diet. Many patients really haven't taken the healthy diet seriously. They're still eating whatever they please. I know we're all guilty of that but at least bringing this type of thing top of mind, especially when people want to do something to help it. I think of it like a prescription, right? It's a prescription for a diet and it all starts when you first wake up in the morning. What is that choice that you're going to make right at the beginning? Is it going to be eggs, spinach, and fruit or is it going to be a sugary pastry, for example? And that can often determine how the rest of the day goes. So, I think that awareness is really, really important.

**Ricky Enger:** Absolutely. I love the way you put that, just waking up, what choice are you going to make? And that does kind of determine how the rest of the day may play out. We hear so much about diet and exercise that it becomes kind of a background thing, we all know we should do, but we'll get to it someday. But if we put that in this perspective that this really can make a difference and it is something within your control. I'm wondering as we wrap up here, if people are listening to this and they're thinking, I would like to know of any additional studies there have been about vitamins or any recommendations that are beyond this podcast, maybe they're just looking for that sort of safe place to go to get these kinds of recommendations. Do you have a couple of resources that you might mention?

**Dr. Sophie Bakri:** Yes. So good references. The societies that we work with in retina, like the American Society of Retina Specialists for example, puts out really good patient information, patient leaflets that are funded by their foundation, and I often give those out to patients. You have the National Eye Institute that also has resources and videos, but also there's the American Academy of Ophthalmology and they have a website called EyeSmart as well, and at Mayo Clinic we have a lot of information that we put out in terms of patient education. I was fortunate to be able to write the Mayo Clinic book on vision and we're doing a new edition, so that has a lot of things. We've got videos out there and a podcast as well that have some information, but you may actually just want to go to the source and sometimes you want to actually look up those articles.

PubMed is the National Library of Medicines online journal repository. And you can look up there the AREDS2 trial that was published in 2013, and if you want to read everything about it, the whys and all the data, I think that's important. The diabetic trials, you've got the DCCT trials as well that talk about diabetes control and diabetic retinopathy progression. So, I mean, there's a lot out there, but I do think it's important to find some credible sources. These are all the types of sites that I tell my patients about and often I'm able to link to them in their electronic medical records so they can click on them at their own pace when they go home. But yes, definitely credible sites are what you want to look for. You'll see a lot of videos out there claiming certain things, and I would just say you might want to be a little bit careful about where some of the stuff comes from.

**Ricky Enger:** Absolutely. You're so right about that. And we will have those links to the resources that Dr. Bakri has just mentioned in our show notes. So, if you're looking for that one stop shopping for a place to start at least we'll have those in the show notes. Dr. Bakri, I really want to thank you for stopping by and sharing all of this wonderful information. I think it's so helpful for people who are just looking for that way to really make some smart decisions and to kind of figure out what those smart decisions are for making sure that they get the best outcome for the eye condition. Really, thank you again for spending a little time with us, and I appreciate your drop and bye.

**Dr. Sophie Bakri:** Well, thank you so much. And I really just want to extend a heartfelt, huge thank you to Hadley. I mean, the work that you do for people with vision loss is just extraordinary. You're providing information but also hope. And I've had so many patients of mine who've benefited from Hadley's resources, just learning from you, from your site, and staying connected with others, and I think you've made people feel a lot less alone. So, thank you for everything that you do.

**Ricky Enger:** Thank you. Wow, we love to hear that.

**Dr. Sophie Bakri:** Thanks.

**Ricky Enger:** Thank you for listening. Thank you. Got something to say? Share your thoughts about this episode of Hadley Presents or make suggestions for future episodes. We'd love to hear from you. Send us an email at podcast@hadleyhelps.org. That's P-O-D-C-A-S-T at HadleyHelps.org or leave us a message at 847-784-2870. Thanks for listening.