Eye on Ergonomics: Optimizing Your Workstation and Posture for Your Vision Transcript

(Transcripts are generated by AI and may contain errors)

Intro and Guest Welcome

One, the rounded back. You want you when you're sitting, you want to maintain the inward curve of your back. You can do that either by if you have to use a towel roll, whatever it is, because you can feel if everybody tries to round the back out and fall apart.

Thank you for tuning into Dr. Talks. We hope today's episode has enlightened and inspired you on your path to optimal health. Each day is a new opportunity to make choices that empower your well-being.

For more insights and strategies, subscribe to our podcast and visit our website, www. DrTalks.com. Stay connected, stay healthy, and join us next time on Doctor Talks.

Real talks from real doctors on the issues that matter to you most. Welcome to today's session on the iHealth Summit. I'm your host, Dr. Rani Banik, and today I'm so excited to welcome our guest, Margie Bissinger.

Margie is a physical therapist who specializes in ergonomics and has helped thousands of people with their posture for better, not just eye health, but brain health and overall health.

So thank you so much, Margie, for joining us today on the iHealth Summit. Oh, I'm so thrilled to be here with you. For those of you who don't know, Margie is really a powerhouse in her area of expertise.

She has hosted multiple online conferences, summits on osteoporosis and bone health. So if you haven't yet experienced one of her summits, definitely for the next one, I encourage you to sign up and join because she is, again, a wealth of information.

Margie, I would love to begin by asking you to share your story of how you got interested in this topic of ergonomics and posture for overall health. It started a really long time ago because I've been a physical therapist now for over 40 years.

And way back, I was my area of expertise when I had my master's in orthopedic physical therapy. So I was working with people with neck problems, TMJ, chronic pain, back pain.

And to me, it just didn't make sense because we would see the patient and they could get better with physical therapy. But then they went back to their work environment.

And that was one of the causes oftentimes.

How Ergonomics Prevents Pain and Fatigue

So it seems so backwards after after they've been injured. That's when they learned how to sit properly, how to adjust their workstation so that they don't re-injure themselves.

But it just didn't make sense. Why wasn't this prevented? All these injuries that really, really changed people's lives could have been prevented. And so that's where I thought, you know, this just if people could learn what to do prior to an injury, why would that not Why would I not get involved with that so I did, I started working with companies going to be corporations and teaching the employees, all sorts of ergonomics desk setups workstation setups, and it made a huge difference.

And so that's just been part of something I've always done ever since early on in my physical therapy career. But

now what's happened over time is that people are more at home.

They're using home computers, you know, that home offices, especially during the same issues were happening. People just didn't know how to adapt. And it's not hard.

I think most of the problem is that people weren't aware of what they could do, because it's not something you learn and that pastor just isn't really talked about that much.

So that's how I got so interested because it was frustrating. to see the injuries that I know could have been prevented. And the good news is that these are easy tweaks and why not feel so much better at the end of the day?

No one wants to be fatigued and it can, as we'll talk about, affect your eyes as well. Absolutely. Thank you so much for sharing that Margie, your journey into your area of expertise.

Just as an aside, some estimates say that most of us, most adults spend about nine to 10 hours a day in front of screen. Some people even more because you combine work with personal use and connecting with friends and family, watching shows like Netflix.

It adds up to a lot of time spent in front of a screen. So it's really no surprise that Our workstations, our ergonomics when we're at a screen are so important, and it's really important to optimize these for our eye health and our overall health.

So can you just first explain a little bit about ergonomics? Why is it so important to have the right posture, the right distances set up at your workstation?

Why is that so critical? What's so critical is because the body can respond to things, but when we're in awkward positions or when we're doing repetitive injuries and not moving, motion is lotion.

So when we're in an awkward position, muscles tighten up. And muscles in terms of the eyes, it can tighten and cause issues with nerves that go to the eyes.

But in terms of the whole body, the body gets fatigued because normally blood pumps in. And then we normally have with movement, we have blood circulating, it goes to the acting muscles.

and then the waist products. But what happens when we're in constant tightness or contraction, we just have waist product products build up. People have felt knots in their shoulders, different things.

The body doesn't do well when it's in an awkward position for long periods of time. And that's what happens. We aren't moving. We're stuck in these positions.

And a lot of times they're not natural positions. And we can, we'll talk about what neutral positions are. The body doesn't like that, tightens up. It becomes painful.

The body then tightens up more. It's called pain spasm pain. It just becomes this negative cycle that by the end of the day, we're fatigued as well as having so many other symptoms.

It's just, it's two things. It's setting up your office, your desk, setting up, setting up your environment so that you can be in a reasonable posture and also learning how to work.

I've seen so often people in companies where they spend so much money on the best equipment and the chairs that move and but the person didn't understand the concepts of what they were trying to achieve.

So it was really so it's a combination of both the worker knowing how to what they need to do taking breaks like we'll talk about as well as setting things up.

Spinal Curves and Better Sitting Posture

So to minimize being in awkward positions that may result in pain and other issues. Yeah, that is so important. I'm so glad that you highlighted that, because when it comes to eye care, most eye care providers, whether they're ophthalmologists, optometrists, will advocate for frequent breaks.

We use the 2020-20 rule, which basically means Every 20 minutes, set your timer, take a 20-second break, and don't look at your screen. Look at something maybe 20 feet in the distance.

You relax your eyes for a short time, and then you can resume working. But what you're saying, Margie, at least what I'm hearing from you, is that there are so many other aspects to optimizing your workstation that, again, most eye care providers may not even be aware of.

I probably am not aware of many of these, so I'm looking forward to learning from you as well. But I would love for you just to share some of these tips and strategies for optimizing workstations.

Okay, so what this slide shows is our, we have three curves in our spine. There's an inward curve in the neck, and then the mid back is outward, and then the low back is inward.

And what this is so important is this gives us structure and stability. If it was just rim rod straight, we wouldn't be able to carry forces through our spine.

So a really important concept is you want to maintain the three curves in our spine and people just left even thinking about the low back curve that's the main one that people don't maintain that will make the difference.

So this just shows, ideally, the ear and the shoulder should be in alignment. Very often, and this is a young person, young analysts, especially now with everybody on their phones, young children's spines are actually changing, unfortunately.

But anyway, most people, a lot of people have the ear in front of the shoulder, which is called a forward head. The problem with that is when your head is forward, it shortens the distance here.

You can feel if your head goes forward, the upper surface spine gets shortened. muscles to the eyes all there's so many nerves not the muscle so many nerves in there when the muscles tighten they compress on the nerve it can give you dizziness it can give you headaches it can give you eye strain so many different things plus a lot of people have headaches just because of this area so it really has an effect on the neck when your shoulders are rounded that also puts everything, it compresses inside as well.

So you can get all sorts of arm symptoms. So it's just a negative, there's so many negative things from this posture and most people don't even, aren't even aware of it.

And this just shows 12 pounds, the average head weighs around 12 pounds. translated through the spine against gravity. But when your head is forward, instead of 12 pounds, we have to multiply it.

People remember physics by the distance. So now it's 36 pounds on a spine. And so most people think just bring your head back. No, the big issue here is the rounded back.

And that's things that's so common, people sit with a rounded spine. So just changing that is amazing. When people learn how to sit maintaining that inward curve in the low back, it can make all the difference in the world.

So this just shows a common young person. And as we see, her head's forward, her shoulders are rounded. And now if she's with a computer, there you go.

You have that. And again, things don't happen all of a sudden. And the body can handle. Sure, if you're for a short period of time, the body can handle and taking the breaks.

But it's the extended period of time that all sorts of problems happen. And this just shows crossing your legs. Guess what that does? Round out your low back.

How many of us cross our back? So what we want to do, this is something that people can do if they're using a chair with a back. They can either have a lumbar support.

If this is for someone who needs the back support, because sometimes you have those cushy chairs and you just collapse or take a towel roll so that when your low back is maintained, it's amazing what can happen.

And this just shows sometimes even sitting on the edge of a chair with your legs separated, how we're supposed to. And a funny thing, a thing people can do, and you can do this now too, is when you're sitting, you want to visualize your head floating up to the ceiling, your spine, because we're so often compressed, but one easy tweak is pressed down into your feet.

And if you do that, you'll feel your spine just lengthens and it feels so good. How easy is that to do? But I also have one of the free gifts for the summit.

I go through, it's called two weeks to better posture. So I have videos of me demonstrating all this, that you can really learn how to do these easy things you can do throughout the day.

Headaches, Neck Pain, and Relief Techniques

And this just shows also where you place the monitor. So one easy thing we can do is, and he wanted around 18 to 30 inches from your eyes. That's approximately One way you can do is just put your hand, put your hands in front like she's doing, and then see how that feels.

If it's too, if you're too close to the monitor, it might be hard and more, you know this better than I do, but maybe it's, it might be harder on your eyes to focus.

And if you're too far away, you may have to lean forward to see the monitor. So we want to have the monitor distance proper. Wow, Margie, those insights were amazing.

I had never even thought about my neck position, my curvature in my spine, because normally I am guilty of doing so many of those things you just showed, so many of those images.

I sit like this, my face really close, I have my feet crossed, I sit cross-legged on my chair or I sit on my knees. Now I realize that all of these are impacting not just my upper spine but my entire spine and I have had some issues with my low back and sciatica for example so I want to take some of those tips to heart so if you can summarize let's say the three or four most important posture ideal posture tips what would they be?

I would number one the rounded back you want you when you're sitting you want to maintain the inward curve of your back you can do that either by if you have to use a towel roll, whatever it is, because you can feel if everybody tries to round the back, you fall apart.

So that's number one. Number two, I think the forward head. And so one thing that they can do, and this is in the exercises, but during the day you can do exercises where you just, if you put one hand on your sternum, one on your chin, and just try to bring it back.

so it's just like you're here so it's just a little bit i immediately feel the difference it's so much more relaxed rather than to be like this just to move back a few inches throughout the day it's not that you have to say that but you can also put your hand you'll feel the inward curve in your neck And when you do that, you'll feel the neck going into your hand.

So very gentle, maybe three to five repetitions, three to five times a day. But it just will really help you get out of that forward head position. So I'd say those are number two.

And then I guess the third one is your shoulders. I think a good posture during the day, and this is also in the form of that, is just throughout the day, same thing, the easy exercises, bringing your shoulders back and down.

breaking those muscles up because sometimes we're here and they're too forward. So I think I would say if you do, because the truth is what I found and being a physical therapist for a very long time is that when I tell people, OK, sit this way, sit that way, they're too busy.

I have to be honest. Oh, where's my head? They're just not thinking about that. However, if they know they have to do a couple of exercises throughout the day, like when they take a break, That they do, and it reminds you, it reminds your body, yeah, my head should be out here.

So I would say though, I'd say if you do the exercises that's on the sheet, or those exercises throughout the day, that's gonna start making a really big difference, and just the awareness.

I think just being aware, are you slumping? And if so, time to make some corrections. Yes. Well, thank you for all of those amazing tips. I'm going to start paying more attention to myself.

And for those of you who wanted to download Margie's free gift, it will be on the show notes below so you can access that and her videos as well. And Margie, I also want to thank you for bringing up the topic of headaches and neck pain because so in the eye care world, we talk about this syndrome called digital eye strain.

And yes, there are visual symptoms like blurry vision, dry eye, trouble focusing, but then there are neck and shoulder issues that many people have associated with digital eye strain and headaches.

And many people's headaches actually begin in the back of the head or the kind of radiating down to their neck and shoulders. So these are some amazing tips to help alleviate some of those maybe underlying root causes for why people are having these symptoms.

So thank you so much. Have you seen this in your clients as well that a lot of these people will have this digital eye strain syndrome? So many, I can't even tell you.

And for numerous years, I also worked a lot with dentists and head, neck, and TMJ pain and so many people. So the thing is, I just wanted to show one of the things.

So that exercise is really great for reducing the headaches because it opens up that area. But I just wanted to show something that's so great. Let's see.

Can you see this? It's called Oxy Pivot. You can get it on Amazon. You can get it whatever. But you lie down. And this puts pressure right on the upper cervical area with books, too.

And you can even lie down like I put some books under your head and do that exercise. But just to stretch it out while you're taking breaks is amazing to relieve it.

Because it's very happened to me who has really good posture. I was so busy. Even though I had good posture, I was just on the computer too long and not taking breaks.

and it's misery it's just so many even a lot of people don't realize it's from their neck but then if you feel you'll feel the knots and it's really tight so doing the exercise lying on the floor doing that and that i'm telling you this thing has helped so we used to make them actually one of the jobs i had we used to make our own with our fingers that's like a technique for a physical therapist you put your fingers there deep pressure but that works so well and it's preventable with that one exercise but it's so true and it's so debilitating and it's so preventable.

So that's the good news. That is again phenomenal. Thank you for sharing that. I plan to try it as soon as we get off our interview. I'm going to be trying that exercise and consider that the device that you showed that's available on Amazon as well.

This has been enlightening Margie.

Desk Setup for Eyes, Arms, and Wrists

Did you know that most adults spend over 10 hours a day on devices? In our screen-dominated world, meet your eye's new ally, Fortify. Fortify is designed to defend your macula against blue light with a potent blend of lutein, zeaxanthin, mesozeaxanthin, and astaxanthin.

Fortify also helps to support your optic nerve, retina, and cornea with Mackey and Bilberry extracts, Ginkgo biloba, and a powerful form of vitamin E called Toko Tryonol.

From teens to adults, Fortify empowers you for healthier screen time. I'm Dr. Rani. Don't let screens dim your view. See the world without limits with Fortify.

Science in every capsule. Act now. Visit my website to learn more about Fortify's powerful ingredients and to purchase. Let Fortify be your partner against blue light.

Fortify, empowering your vision. In terms of setting up our workstation, whether it's at home or in the office, what are some tips that you have to help reduce eye strain?

So in terms of also the eye, we want the monitor just at either eye height or drop below. You know, and that's a really important concept. And we want the monitor, actually this looks a little high, but we want, this is a fake person.

And then where the arms are, that's really important too. So you want the elbow bent to 90 degrees or a hundred degrees. We don't want it, we don't want it bent to the right angle or a little, a little more in terms of that.

And we want the desk height around one to two inches below the elbows. It's around a little bit lower than the elbows. and because a lot of times people will have it higher and the other thing very important the wrist we want a neutral position can you see me okay so we don't want it to the left we don't want it to the right so i think those are really important and we already talked about the distance but some this is a life changer i can't even tell you the amount of injuries since the sit to stand desk so this is a cheaper way to do it you can just use a converter But that has changed everything because as I said, motion is lotion.

So just moving your position is in terms of going from a sit to stand and it's huge. So I'm such a big believer and I've seen such a reduction in injuries since people have started using this.

That just shows her sitting, same desk with the sit to stand. Now, this is very interesting. So I like this, Eric, this is just showing you to put a mat under the floor because we want to move.

It's that staying in one position that causes so many problems. But what did we just talk about? This is not a good ad because his arms are not bent to 90. It's way more and the monitor is not at all at eye level or slightly below.

So where maybe this is good for his legs, this is not a good setup. Now here's the biggest thing I would say if there's one thing because I give these talks a lot and people submit their workstations and this is the biggest one I see people are working on a laptop.

So we just talked about a couple things we talked about the monitor being at eye height or a little lower right and the arms the keyboard. a little, your elbows being bent 90 degrees.

Guess what? That is absolutely not possible with a laptop. Now the body can accommodate this short periods of time, but all day being on a laptop, easy correction.

What you do, as you see in this picture, so you can have a different monitor, And then you have a keyboard and a mouse and or you can buy a stand for your computer.

And this isn't an expensive thing. So if you're of course, if you're at a Starbucks, you may not bring all this or whatever. But when you're on something for a period of time, this makes all the difference and you can set it up.

So you're not because if you're on the laptop, you're either looking down all day. and your arms are tightening. So it's such an easy tweak. You get a stand, you get another additional monitor connected.

And when my kids went to college, this is a long time ago, not a long time ago, but I remember for their room, we got a whole setup and people are like, what are you doing?

This really helps. And Margie, an external keyboard also, because if your laptop's all the way up here, your arms are going to be at this angle. Right.

You get no matter what, you either get, so you either get a monitor like this or you get a stand. So you could put your laptop up there and then you get an external keyboard and a mouse, external mouse.

So then you can set that up. So everything is in good position, but that's the biggest thing because it's, and then you see people on the laptop, on their couch, on their, really slouched over.

So if you combine the good setup and what we talked about in terms of maintaining your curves, you're good to go. Okay. So this just shows that this is an exaggeration.

This is me. Oh my goodness. I'm cringing. This is exactly what I do. So many people do that. Look at, and imagine the eyes, the neck. This is, this is not tolerated by the body and look at the wrist.

We said neutral wrist. So this is absolutely not a good position. And then this slide, someone who has issues with their eyes.

Laptop, Monitor, and Multi-Screen Adjustments

So they're not doing what you tell everybody to do to take care of their eyes or if the monitor was too far, but obviously he's having issues. So now he's in a very awkward position.

because of the slides. So those are the major things I'm seeing if I had. And also the knees, you want to make sure they're around 90 degrees, feet flat on the ground.

A lot of people let their feet dangle, so just put something under. We used to say put a phone book under, but they make foot rest because that puts a lot of force on your low back as well.

So I think I covered the main things in terms of what you can do. Got it. Thank you for showing those slides Margie. It was so helpful to visualize all of these different positions that many of us do.

Many of us are guilty of including myself. I wanted to ask or add two other points to what you said. You mentioned that the monitor should be at eye level, not too low, but Oftentimes, especially if people are working on multiple screens, they'll have monitors, let's say two or three monitors that are positioned very high up.

And I always tell patients that's really a no-no because when they're looking up at the screen, their physical eye is elevated and it leads to more dryness because the eyes just dry out.

We're not blinking as much when we're on the screen and then you're exposing more of the eyeball to drying out. Have you had patients who've had monitors that are very high?

What are some solutions you offer for that? issue. Such a good point. I should actually mention that when we're talking about the monitor height, because if it's too low, you're straining your neck and too high.

You're also getting compression and the same thing. You're getting the dry eye because people aren't blinking as

much when they're looking up. So yes, that's such a good point.

And yes, that is an issue because that's not a good posture. So we've worked things out where they put the monitors close to each other. Or people say at one monitor, they move their chair, so they're looking straight.

But you can lower the monitor or raise your chair. There are definitely things that can be done. Or stand, right? Or stand. But a lot of people, when there's multiple monitors, what I have somebody do is have their main monitor in front.

And then if they need to move their chair so that they're not awkward for the monitors, you do the best you can. And the body can accommodate. It certainly doesn't have to be perfect by any means.

And I'll go somewhere and I'll be on hours on a laptop because there's no other option. So you do the best you can within your circumstances. But all day long, absolutely that's going to cause a problem.

Yes, I have them either stand, adjust the height of their chair or change things. So that's not a good situation. I love your tip about having the main monitor optimized perfectly.

And then if you need to look away to the side with the supplementary monitors, it's a shorter period of time that you're turned or not ideal. You know what I'm saying?

So instead of torquing your body, The second thing I wanted to just mention for our audience is that I'm going to show this image again of this individual who's Really not clapping for it.

It looks like he can't focus well enough to look at the screen because he's so close, even though he's wearing glasses. So I wanted to put a plugin for you really should see your eye doctor and get your glasses or whatever it is you're using optimized for the distances that you need.

There are glasses that we call work progressives that are optimized both for intermediate distance, which is arm's length, and then up close. If you're switching back and forth between looking at the screen and then looking at your phone or looking at paper on your desk, you will be optimized.

For example, if you're wearing your distance glasses for this type of task, it may not be ideal because you may have to adjust and it's going to be blurry and it's going to add to your digital eye strain.

Talk to your optometrist or ophthalmologist about optimizing your prescription for the distance that is best for you. So just a little plug there for that.

No, I love that because it's so important and people just people go through their day and I'm guilty of this in other areas as well. You're busy. You don't think about zone.

No big deal. But what's going to happen when you take these tips? You're going to have so much more energy. It's incredible the difference. when your body isn't tight or forgot.

Think about how sore he's got. Yeah, and I've been there. So in our last few minutes together, Margie, I wanted to ask you, do you have any tips for phones, smartphones?

What is the optimal position? Because a lot of people, they look down, they're looking very close. So again, they're in that hunched over position. What is the optimal viewing distance for a phone and position?

Okay, so here's the thing, it's the same posture things. Actually, I have Tex Neck in the handout, in the free handout.

Phone Posture and Closing Resources

I show a video on Tex Neck. But the point is you wanna be, here's my phone, you wanna be in a position with good posture. So what I tell people is whenever you can, and treat it, you don't wanna be rounded, so you wanna almost make it an exercise.

Shoulders back and down, you're holding your phone. But when you're doing that, a couple things you can do. whenever possible, dictate. So instead of texting, that's harder.

If you have a stand on your desk, if you're doing anything, you can get a little seat. So the key thing is that you're trying to be in as good posture as possible, so that you don't have to…

Because I'm thinking, actually, when we're looking at our phones, we don't just hold our phones like here, right? So we're looking down anyway, and that automatically causes like a flexion in the neck, right?

So how do you avoid that? So what you do is you hold your phone with your shoulder blades back and down in a good position. And if you have to text, but if you can put a stand, you know, that's that you're not on the side and then you're just, yeah.

So that's one option. Dictating, so you're in a good position, you're dictating, or you can even have headphones and dictate. Dictating is great, and just tell the person if something's wrong, so be it.

But I think, and then afterwards, make sure to do some exercises back and down. But I think if you think about how can I maintain good posture, they also make something, I forgot the name of it, I showed in the video where you can put it on the back of your phone and and hold your phone.

You can also do that and that makes it easier so that you can keep yourself in a good position. But again, if your shoulder blades are back and down, that's going to keep you from this rounded position.

So as an exercise, shoulder blades back and down and then afterwards do a few just exercises where you're going your shoulder blades back and down, your neck, but counteract if you have been at all in a position that you wouldn't like.

To counteract that would be helpful too because Oh, excellent recommendations. I'm going to take that to heart. I'm going to tell my family, get them to change their positions as well.

So for all of you out there, try to absorb all of this for yourself, try to make some changes, but also share them with your friends and family, because if you watch them, you'll probably see many of them in those types of positions as well when they're at their workstations.

Margie, this has been incredible. Some truly amazing insights that you've shared with us. We are so grateful to you for coming on the iHealth Summit and sharing all of these tips and strategies.

Now, if anyone wanted to learn more from you, aside from the free gift, how could they find you online? If they wanted to become a client, participate in one of your online programs, how could they find you?

Yeah, the best place is two places. My website's just margiebissinger.com. And then my YouTube also, I have a podcast called happy bones, happy life. And they can find that in any podcast station, YouTube, wherever they can find out the podcast, which has all sorts of interesting topics on it.

So I would say those are the best places. I'm on Instagram as well, but I think the, I think the. All of those are good, but I think the website has all more information on it.

Okay. Thank you. We will certainly share all of those links for our audience. Again, thank you Margie for being a guest on the iHealth Summit. We truly appreciate you and your insights and thank you all for joining us and we look forward to seeing you during our next interview.

So stay tuned. Thank you for tuning in to Doctor Talks. We hope today's episode has enlightened and inspired you on your path to optimal health. Each day is a new opportunity to make choices that empower your well-being.

For more insights and strategies, subscribe to our podcast and visit our website, www.doctortalks.com. Stay connected, stay healthy, and join us next time on Doctor Talks.

Real talks from real doctors on the issues that matter to you most.