

Hey there, beautiful! 🌈 Before you dive in, a quick heads-up: this transcript is a super close-to-verbatim buddy from our podcast, but it's got its quirks! We didn't call the grammar cops on it, so you might bump into a typo or two. But hey, that just adds character, right? 😊 Embrace the wild side of language and enjoy the read! Happy exploring! 🚀



## Prevent Dementia and Boost Brain Health

**Carmen Hecox:** Do you often wonder if your brain fog could be early signs of dementia? I know this thought has crossed my mind many times. Today's guests are going to blow your mind because they're talking about the brain, how to keep it sharp, and the surprising daily habits that might be dimming your mental spark.

Joining us are the dynamic duels, Dr. Emily and Mitchell Clionsky, who are not just partners in life, but they're also in the fight against cognitive decline.

They're here to share insights from their groundbreaking book, *Dementia Prevention: Using Your Head to Save Your Brain*.

And trust me, by the end of this episode, you'll look at your daily routine in a whole new light. Now, let's get into it because what you will learn here today is nothing short of hope for your brain health. Let's roll.

**Carmen Hecox:** Hello and welcome to Create the Best Me. Today on the show, we have Mitch and Emily Clionsky. Welcome to the show.

**Emily Clionsky:** Hi there, Carmen. Thanks for having us.

**Carmen Hecox:** And you guys are the authors of an amazing book. It is about dementia prevention. Which I think is very important, especially because my audience is women in midlife. And we go through what many of us call brain fog. And so, tell us about your book before we get into everything.

**Emily Clionsky:** Mitch, why don't you start?

**Mitch Clionsky:** Love that. Just sort of hand it off like that.

**Emily Clionsky:** Absolutely.

## Understanding Dementia Prevention

**Mitch Clionsky:** So, dementia prevention is a really important topic because one out of two cases of dementia can be prevented. So, we wanted to put together a compendium of information by sampling from all of the different areas that impact dementia.

And there are about 25 different factors, all of which can play a role in someone's dementia risk. And we wanted to get past the headlines, the gotchas, the clickbait that you often see where eat this, take that, this will help, that won't help, kind of things on the internet to give some real science, but to then translate that science into language that everybody understands, just the same way when we see patients in our office.

Emily's a physician, internal medicine doctor and a psychiatrist. I'm a clinical neuropsychologist. We want, when the people sit in front of us, we talk to them for them to really appreciate what's going on with them, what they can do to make a difference. And so the whole idea of the book is to pull that together, to give everyone who reads it a guideline for things that they can do to make a better self and to protect their brains going into the future.

## Personal Stories and the Impact of Dementia

**Carmen Hecox:** Yeah, and this particular topic it hits my heart so hard because my maternal grandfather developed Alzheimer's. It's interesting because he started to show signs of cognitive issues right around the time he decided to retire. Or was forced to retire. So it was, he was less active. And, when he passed, he didn't even know who a lot of us were, except for some of the people like my mom, people from way deep into the past.

So, this particular topic, like I said, is so important to me because I fear that it came from my maternal grandfather had Alzheimer's.

**Mitch Clionsky:** And the reality, almost every one of us is touched by someone in our lives, grandparents, or our own parents, like my mom, or our siblings. All of us know someone who's had a mental deterioration in their thinking, in their memory, in their ability to care for themselves. And it's a growing problem because people keep living longer.

This is a disease of aging. And so, when you see the statistics going up and why it becomes a bigger problem for us, both personally, but also as a society is because there's just more of us who are going to be exposed to this risk rather than dying before we get it. So, if we're going to live a long time, we want to live the best lives we can up to the very end.

## The Role of Aging and Estrogen in Brain Health

**Emily Clionsky:** So, in other words, aging is the greatest risk that we all have for dementia.

**Carmen Hecox:** Yeah, and I always look at aging, because my stepfather died at the age of 52 due to esophageal cancer.

**Emily Clionsky:** Oh, that's so young.

**Carmen Hecox:** I always say that getting old is a gift. But then that gift comes with that risk and that risk is your brain starts to develop deterioration due to dementia, Alzheimer's. What was the other one?

**Mitch Clionsky:** Well, dementia is a big category Alzheimer's is a form of dementia. Vascular dementia is the form of dementia. You get dementias due to Parkinson's disease. Dementias due to Lewy bodies. Dementias due to hitting your head too many times.

**Emily Clionsky:** Dementias due to drinking too much alcohol. Not getting enough exercise. Getting an infectious disease. There are about four hundred causes of dementia, at least.

**Mitch Clionsky:** Well, we have to really look at the person as a whole before figuring out where you can improve things to reduce your risk.

**Carmen Hecox:** And I also, the part that really resonated with me in your book, because like I said, the women that most on my show caters to women in midlife. You talked about as we start going into menopause or we start hitting those menopausal years, perimenopause, menopause, or post-menopause, our estrogen level starts to deplete and that causes memory issues.

**Emily Clionsky:** Huge changes, absolutely. And we didn't have a lot of documentation. We didn't have a lot of research, and we still don't have enough research about how that estrogen pause really affects our brains. But this much we do know for sure, Carmen, that when we begin to go through pre-menopause now in the United States at the age of 42, it used to be 52, it's now 42. We begin to have changes, not just in our body, in our cross-linking of our collagen in our face. And in how well our airway muscles respond to keeping our airway open when we're sleeping at night. And how fast we accumulate clots and garbage and plaque in our heart vessels and our brain vessels.

But our actual cells are taking a toll, are paying the toll, a price for the fact that they don't have enough estrogen because estrogen actually affects how all of our brain cells manufacture new parts, new receptors, and can actually build new connections. So, it's vitally important for every woman to learn as much as she can about how to optimize her brain health well before she hits perimenopause.

Because when we go into perimenopause, we really want to be geared up for doing everything we possibly can through those next 10 to 20 critical years. And It does make a huge difference.

**Mitch Clionsky:** One of the things that I always like that when you have talked to me about this, because I didn't understand this part of it, is how it affects also the muscles in your neck and how that affects how you're breathing when you're sleeping, which is something I think that most people never pay attention to.

**Emily Clionsky:** Right.

# Sleep Apnea and Its Connection to Cognitive Health

**Emily Clionsky:** And this is another female issue that I have a real problem with, medicine today. We are still not recognizing the fact that women develop obstructive sleep apnea. We still tend to think of that condition, which is when we're sleeping our airways collapse and we don't get enough air down into our lungs, so we don't get enough oxygen into our brains. And if you deprive your brain of oxygen, your brain cells will die. I guarantee it.

So, the important thing is first of all, women are ignored in a lot of respects by modern medicine. And we don't have doctors still convinced that we have things like atherosclerosis at a rate that's just as high as men. Obstructive sleep apnea that's very, very potentially fatal.

And so, even if we are not overweight, even if we don't have a thick neck, even if we don't have high blood pressure, even if we don't have PCOS or polycystic ovary syndrome. Even if we don't have any of those kind of health conditions, we can still be thin, be a nice little size six or eight and still have obstructive sleep apnea.

Then when we are deprived of our estrogen in our 40s, what happens is our airway muscles actually change how they are tethered. In other words, how they're situated in our body, and they lose their resilience, and we develop a much higher rate of obstructive sleep apnea.

And doctors are still ignoring that. Mitch, what's that study where they pointed out in JAMA? Where women who had obstructive sleep apnea and were identified as having obstructive sleep apnea had a delayed onset of dementia when compared to women who did not have their obstructive sleep apnea corrected

**Mitch Clionsky:** So, you're talking about the I think the, Ancoli Israel study?

**Emily Clionsky:** Yes

**Mitch Clionsky:** And basically, what they found was it took a group of women who had mild cognitive impairment. In other words, who were on the verge of developing dementia and they pulled out of this the women who had sleep apnea of which there were a lot because it's a very high correlation very high co-morbidity.

And then half of them got treated for their sleep apnea so that they would now not be stopping their breathing while they're sleeping and the other group that were not treated and when they compared the two, the ones who were treating their sleep apnea, we're at mild cognitive impairment for a long, long time. And the ones who did not treat it progressed into dementia just a couple of years later.

So, it becomes a really important factor. It's one of the aspects of the model that we put together that most of the people, despite all the research out there, don't include when looking at what contributes to their risk.

But in my practice, it is a huge issue, and we get people tested all the time. And 70 to 80 percent of the people come in to see me end up having sleep disorder breathing. We fixed that a lot of good things happen. You have more energy; you sleep more continuously through the night. You spend more time in stage three sleep where all of the cleaning out of the waste products of thinking during the day, because we think it's electrochemical process, it creates byproducts.

Well, there's a process that happens while we sleep that cleans that out it's called the glymphatic system. And if you're not down in deep sleep long enough, there's not enough time for that to occur. It doesn't occur correctly. So, there's a lot of stuff with this whole sleep brain breathing connection.

**Emily Clionsky:** Right.

**Mitch Clionsky:** Turns out to be really important.

**Emily Clionsky:** One of the interesting things that I found was that, as I mentioned, I went to medical school a little later than most people. I started at 41, 42. So I was much older than everybody else in my class. When I got out of medical school, I felt like I had somebody gave my brain a facelift, because all of a sudden, I was thinking and having to work harder intellectually than I ever had to before in my life. But it was a very challenging thing. So, I happily go on through my residencies and I get into my late 50s, and all of a sudden in the afternoon, after seeing patients around three o'clock in the afternoon, I'm starting to fall asleep in front of my computer screen.

And I'm nodding off and I'm half the time, not remembering stuff that Mitch has told me. Or I'm going to the grocery store, and I can only remember three out of six

things I'm supposed to get. And I'm forgetting words that I learned in medical school that described conditions or diagnostics or treatments. That was terrifying.

So, the good news was that I was treating patients for this condition, and it finally occurred to me that despite the fact that I didn't have high blood pressure, that I wasn't overweight, but I sure as heck was postmenopausal, I ought to have a sleep study. And sure enough, I had moderate obstructive sleep apnea. I went on continuous positive airway pressure, just like I put my patience on it, and within about a six-month period, I actually lost a few pounds without trying.

I wasn't needing to take naps in the afternoon. I wasn't cranky and as depressed as I had been. And I was certainly more alert, and I was back to my normal feeling like I was 40, 45 again, except now I was in my early 60s.

So, it's something I really took away from my own experience. But the wives of all the people who are coming in to see me, their husbands had obstructive sleep apnea. Generally, these women were the same generation that their husband was; I was diagnosing the husband with obstructive sleep apnea and helping his cognition come back to normal, but it occurred to me, who's taking care of these women? And the brighter women, of course said, hey, could you send me for a sleep study? And sure enough, consistent with some of the data that has been since published, when you get above the age of 70, one out of two people who have no symptoms of this condition actually have obstructive sleep apnea.

And it's one of the most guaranteed ways to develop dementia is to leave it untreated.

## Challenges in Medical Practice and Sleep Apnea Treatment

**Carmen Hecox:** So, Emily, tell me, because you are a medical doctor, why aren't doctors Asking the questions or even just making it part of like a blood exam? Let's go send you to get a sleep test. Why? Why aren't they doing this?

**Emily Clionsky:** Because, you know, to be blunt about it, they're not paid to do that. We used to think in terms of quality of medicine 30 years ago, certainly 40 years ago. Then we had an evolution in medicine where insurance companies took



control of our healthcare system, and they were primarily interested in the bottom line.

And so doctors had to even be incentivized by Medicare to keep track of blood pressure. One of the most fundamental things, one of the most fundamental factors that actually affect our brains as well as our hearts and our kidneys. Well, lots of studies have demonstrated that so long as you are paying doctors in this country and other countries, by the way. This is just not an American problem. So long as you incentivize doctors financially to do something, they will do it. Stop the financial incentive and their change in practice goes away. They will stop doing whatever you were incentivizing.

So, the government really had to take, a strong, beat them over the head approach to checking on things like blood pressure, cholesterol, urging mammograms, in men, or in fact, both, genders urging colonoscopies. But doctors don't really feel comfortable with the connections between, say, obstructive sleep apnea and dementia for one thing, to speak directly to that point. They're not aware of it and they're not compensated or rewarded for identifying it. And it takes time to treat.

**Carmen Hecox:** Yeah, and like you mentioned, you know, it almost seems like to me that the only people that are maybe getting the attention that maybe you need to take a sleep study test is, yes, men, but also people who look unhealthy, people that have thicker necks or are on the BMI scale show that they're obese or morbidly obese. But people that look like me or you are being ignored because, oh, they're healthy. They're not taking any medication, they're healthy, they're good.

**Mitch Clionsky:** I think it's perhaps one or two other factors.

**Emily Clionsky:** No, please.

**Mitch Clionsky:** A couple of them are governmentally related. For example, you may not know this, but the doctor who orders your sleep study can't do the sleep study, can't interpret the sleep study, and can't give you the equipment to treat your sleep apnea.

To avoid doctors refer it to themselves, essentially setting up a little testing and treatment mill, the government, primarily Medicare, but rolled down into the other ones, has separated those functions. So, if you're a doctor who wants to give someone a sleep study, especially before the days of home sleep tests, where you



get them essentially through the mail, you have to refer them out to a sleep medicine specialist. So, you have to wait for there to be a space available for an overnight sleep study in their lab. Not such a big issue now, but even so, that's then going to go out to a specialist who's connected with a sleep study to read it. Then you're going to have to get a vendor who's going to give the CPAP machine. But the other thing is too, you're probably going to have a long discussion and perhaps a struggle with your patient. Because when I send people for sleep studies and they come back positive, where we talk about the results, I've got to really sell them on doing something which they never grew up expecting or hoping to do. Gee, can I get old enough, I can wear something over my nose while I sleep at night?

**Emily Clionsky:** Nobody was ever born wanting to grow up with a piece of plastic on their face.

**Mitch Clionsky:** So, we have to really explain why this is important and why it will reduce the risk of strokes and heart attacks and erectile dysfunction, while it's going to give them more energy, while they're going to sleep through the night. It's a long sell and there's still this back-and-forth kind of thing and a lot of work to do, which is why of the people who are diagnosed with sleep apnea and prescribed CPAP, only 40 percent stick with it. And that's the problem, most people don't.

And so, there's too much work involved. So, if you don't, if it's not going to smack you in the face, if you don't absolutely have to do it and you've got maybe four other medical conditions you're treating, you may not do that.

**Emily Clionsky:** Unfortunately, what a lot of people don't appreciate is that lack of oxygen in your brain causes your blood pressure to be high, causes your cholesterol to be high, causes you to become diabetic, causes the inflammation associated with obesity and causes excess weight on your body, as well as affects your kidneys. Causes you to need to take more medicines because you're getting up in the middle of the night peeing, and you don't want to do that, so you take a medicine for that, and disrupts your sleep, so you have an abnormal sleep architecture, so you start taking the over-the-counter Tylenol PMs to go to sleep. And then don't have a normal sleep architecture to begin with. So, it's a vicious, vicious circle.

And oh, by the way, for 70 percent of women who were depressed, it could have been addressed by addressing their sleep apnea.

**Carmen Hecox:** Yeah. Yeah. And another thing, because my husband complains about this, and he has valid reason to complain, because I've woken up because of this. I've heard myself snore. I have woken myself up because I'm snoring, which is weird. But he, he'll sometimes tell me it's like, oh, you snored a lot last night. And so when I was reading your book, I noticed that, that that was kind of an indication, you know, you might have sleep apnea.

**Emily Clionsky:** Highly probable. Forget this might stuff. Highly probable.

**Carmen Hecox:** Can you talk a little bit about why people snore so that people can understand the correlation here?

**Mitch Clionsky:** And I want to make a small adjustment to Emily's statistics earlier, that 50 percent likelihood actually begins at age 58, not at age 70.

**Emily Clionsky:** That's right. You're right. 58.

**Mitch Clionsky:** Yeah, this past summer there was a big study published 6,000 people from the general population ages 58 and older. So, we're talking about an even younger group and a higher probability than anyone imagined.

Why do you stop? Why do you snore? Well, imagine you somebody stuck an oboe down your throat. Your throat essentially becomes like a woodwind instrument. It's to read, vibrating as it's partially closed. And the air passes in and out. And then there's the times when you stop breathing entirely because your airway closes and you're not snoring, you do this instead, you do this. If that's a familiar sound, you've stopped breathing.

**Emily Clionsky:** And part of the reason why you do that is your brain is sitting there saying, "I need oxygen! I need oxygen! I need oxygen!" So, you may have been in a very deep sleep when your brain finally sat there and said, she's starving me of oxygen.

Brain, I got to get more O<sub>2</sub>. So the brain tells the heart work really, really fast. Start pumping the blood really, really fast. And the brain, also releases all kinds of chemicals and it causes you to come up out of the deep stage of sleep into a more superficial stage of sleep where you are then aware of the fact that you're snoring and it allows some bit of control more to come back into those muscles so that they can open a bit more and you can get some air in there.

**Mitch Clionsky:** So, when are you getting your sleep study, Carmen?

**Emily Clionsky:** Yeah.

**Carmen Hecox:** I don't know, I, because I was just taking, I was writing notes as I was reading your book. So, I could read the book faster, but I wanted to make sure that I actually absorbed the information. So, I was doing notes or just taking notes. And so, I told my husband, I said, hey, how many times do you get up to go potty at night?

And I said, because according to the doctor's book, it references that your brain is sending another message when it's not causing you to do that loud noise. Now talk about that.

**Emily Clionsky:** Well, remember when I said the brain is desperately needing oxygen. Well, the way it gets the oxygen is that it needs to get more blood. The way the brain gets more blood is to tell the heart to pump faster. So that message gets sent to the heart, the heart is squeezing more rapidly and at some point stretches the walls, the muscles in the top part of the heart called the atrium. When those muscles stretch, they release a hormone called Atrial Natriuretic Peptide or ANP. ANP makes you pee. It literally takes blood, because your heart thinks it's in fluid overload, because there's so much fluid in your heart at that point. So, it takes that blood, and as it's passing through the kidney, makes you create more urine at a time of the night when you're not supposed to be doing that.

**Mitch Clionsky:** So that fills up your bladder.

**Emily Clionsky:** Fills up your bladder and you gotta go pee.

**Mitch Clionsky:** Then you come back to bed and then an hour or two later, same thing happens and you've had a sip of water, maybe, and you say, how's that possible? Where's that coming from?

**Emily Clionsky:** Where's that water coming from?

**Mitch Clionsky:** Coming from you.

**Emily Clionsky:** Yeah,

**Mitch Clionsky:** And that could happen we see people all the time, three, four times, five times a night, that they're up and going to the bathroom. And funny thing is when they treat the sleep apnea, they go back to having, oh, maybe an awakening per night. So, they actually would start getting more sleep.

**Emily Clionsky:** Right.

**Mitch Clionsky:** So, this is all interwoven.

**Emily Clionsky:** The other interesting thing about it is that while there's not a lot of science about this, there are a few interesting studies that have demonstrated that women who have nocturia, which is a technical term for having to get up and go pee in the middle of the night. Women who have that bladder problem at night, if that's not corrected, it will be more likely to lead to overactive bladder problems during the day. which we're predisposed to anyway particularly if someone's had a vaginal delivery of a child.

**Mitch Clionsky:** And so, then you go to your doctor, urologist, and gynecologist, you say, man I got overactive bladder. And the doctor says, here's a pill that's going to tighten your bladder so that you're not having accidents. And you say great, and your brain is likely saying not so fast this medication you're giving me is Anticholinergic. This Ditropan, this Detrol, this Oxybutynin this is lowering the central levels of acetylcholine in my brain and therefore it's making me a little stupider. It's making me not as able to think because we want to keep those acetylcholine levels up as high as possible.

And three out of the four medications that we've used for dementia for the past 25 years do exactly that. They keep those levels up. So now we're pushing down levels that we're trying to keep up. And so now you've got another problem, not only are you still getting up three times, but you're not wetting the bed.

You're getting up because you're tighter in your bladder because that's working. But also, it's contributing to your lower acetylcholine as is the sweet medication you're taking as maybe three or four other medicines that you're taking for allergies or for your heart or for your depression or any number of things.

And so, there's this thing called the anticholinergic burden that is a cumulative kind of thing where these each add up and we'll suppress how your brain is working. And so sometimes the deprescribing of things that people are taking over the

counter, particularly, really improves how people think. And it's related to how they sleep, which is related to how they breathe. Interesting kind of stuff where this is really quite a complex, but interesting kind of phenomenon.

**Emily Clionsky:** And women can have alternative ways of addressing that nocturnal problem in addition to getting their obstructive sleep apnea treated, which they absolutely need to do; when you have relaxation of the pelvic floor muscles, there are specific treatments that don't need to be medication based to help that. We didn't have them 10 years ago. We've got them today, and so whether it's a physical therapy approach, whether it's electrical stimulation approach, whether it's cognitive behavioral therapy, in addition to both of those two physical approaches. These things really are treatable, in addition to which one can consider, unless you've had breast cancer or some kind of reproductive organ cancer. An estrogen replacement that can be put in every 90 days will protect you against urinary tract infections that we're more prone to when we're postmenopausal anyway and will actually help with the urinary incontinence problem. It's all tied together.

**Mitch Clionsky:** And there's also a couple of medications which work on the peripheral acetylcholine but are not so much involved in your brain's acetylcholine levels. So, there are some other alternatives that your urologist, even if you didn't want to go to the behavioral route

**Emily Clionsky:** Right

**Mitch Clionsky:** or the hormonal route, they could just switch you from one medication. There's two of them that are out there that are lower in this, that may do the same job for your bladder and do an easier task on your brain.

## Alternative Treatments and Personal Experiences

**Carmen Hecox:** I had a child older in life, I gave birth to my daughter when I was 40, cause I hit the reset button, decided to have more children. And after having her, I had bladder issues and I kind of thought, oh, I'm going to let my body adjust. So, I waited about three years. My body didn't adjust. I had bladder issues. And so,

I went to my urologist and my first thought was, I'm going to take a pill. And he was against that. He said, you're too young. He says, it will solve the problem, but it'll create a mountain of other problems. And so what he recommended, and I've been doing this for about two or three years, it's a TNS procedure. I think that's what it's called. They put like a needle. It's kind of like acupuncture on my ankle. I sit there for 30 minutes. stimulates and he calls it voodoo because it works for some people, and it doesn't work for some people.

**Emily Clionsky:** It depends on if your sacral arch is still intact or not and it is it's actually proven effective not just in actually very healthy women like you but in women who've had spinal cord injury women with multiple sclerosis women who are much older even than you are. So yes, that is absolutely, the other name for it is Transcutaneous Tibial Stimulation. Lovely, you have a very smart doctor. You are really lucky.

**Carmen Hecox:** I think it says on my chart because I always tell my doctors let's do a more natural approach. I do not want to take drugs. And so, he recommended this because I suffer chronic migraines as well. And so, I do get Botox every 90 days for my migraines because I got tired of taking this list of drugs to try to prevent migraines. And what it was doing, it was causing all kinds of other problems. I was taking Neurontin, which I believe a lot of people take, and I call it the stupid pill because it made me feel dumb and I started repeating myself and I had this tick, you know, where my leg would jump. It was bad. And took six months to get off of it.

**Emily Clionsky:** Absolutely. You're right in your perception about Neurontin that a lot of people have that kind of reaction. There's a couple of other interesting things. You know, we always ask about headaches. We ask about whether you had premenstrual headaches, whether you get chronic headaches, migraine headaches, if you had headaches after you had a head injury, a traumatic brain injury.

So, we're always focusing also on headaches in patients who have a dementia risk. Because we really want to get at things that are fixable. So, one of the interesting things that we found is that patients who have obstructive sleep apnea that is not treated, do have a higher tendency to have headaches, particularly in the morning, and that is directly correlated with the chronicity that you would characterize as a chronic migraine.

So, you will do yourself a favor if you have this taken a look at

**Carmen Hecox:** Yeah, I'm determined I'm going to contact my doctor and have him send me. And because I've also seen on TV that you don't have to wear a mask anymore. There's this,

**Mitch Clionsky:** stop

**Carmen Hecox:** Oh, okay.

**Mitch Clionsky:** They fooled you with that one they fooled you with that one. You're talk about the Inspire technique where it looks like oh, you're just holding up your remote control on your place it over here and you're good to go. Yeah okay.

So, here's the truth about inspire. This is why we don't recommend it for most people. You have to have moderate to severe sleep apnea to be a candidate.

**Emily Clionsky:** And tell her what that means.

**Mitch Clionsky:** That means I was about to.

**Emily Clionsky:** Okay.

## Understanding Sleep Apnea and CPAP Myths

**Mitch Clionsky:** That means that you have to stop breathing like 20 to 30 times or more per hour.

**Emily Clionsky:** 30, 15 times an hour.

**Mitch Clionsky:** Basically, where they decide. Thanks. So that's number one.

Number two, it only works in about half the people.

Number three, it's a surgical procedure. So, they're actually implanting a stimulator there and it's only going to lower your rate by about 50%.



So, if you're one of the people who responds to it, you're not going to go from, let's say, 25 times per hour to only about 10 to 15 times per hour, where you're not breathing. Guess what? You've still got sleep apnea. So, the issue with the CPAP is hugely overblown. They particularly set up those to play on people's sense of, I don't want that on my face; it's like having an octopus on my face. I don't want to look like that blah, blah, blah. I won't be sexy. It'll make me feel old. Which is what most people think.

## Reframing CPAP Usage and Alternatives

**Mitch Clionsky:** So, we have to deal with that by helping them to reframe the treatment approach to this.

One of the things that they need to understand is that they're putting it on after they've had sex.

**Emily Clionsky:** Yeah, you don't put it on before sex, it gets in the way. You have to put it on after.

**Mitch Clionsky:** After. So afterwards, if you're a guy, you don't care.

**Emily Clionsky:** That's right.

**Mitch Clionsky:** And if your wife is putting it on, go ahead. You're fine with that. I've never met a man who says, gee honey, I'm really upset about the fact since we've had sex that you're sleeping with something on your face.

He doesn't care. And the lights are off. And so no one's going to see you wearing it. That's number one. Number two, most of the problems people have because they're active sleepers can be addressed by where they kind of mask they have. Some of them actually work with a little swivel on the top so it doesn't get in the way.

And most of it can be worked out. It's one of those trumped-up kinds of problems to sell a very expensive surgical procedure. I recommend it for my patients who are moderate to severely demented and have sleep apnea because they're not going to figure out how to use a CPAP machine. And actually, before that, I would have them wear a dental device.

And the dental devices are a lot easier to use. They're only half as effective as the CPAP, but people tend to wear them more. So sometimes it sort of nets out at the same level of treatment. But ideally, if you can use a CPAP device, they are quiet, they are easy and

**Emily Clionsky:** Portable.

**Mitch Clionsky:** Portable, yeap

**Emily Clionsky:** I was on the road four days out of seven, in 2014, 2015, and I had it in my suitcase every single trip. I wouldn't go anywhere without it.

## The Impact of CPAP on Mental Health

**Carmen Hecox:** So, talk about in your book, you had this patient who suffered of PTSD. He had depression. He did all this stuff, and the solution was a CPAP. Talk about that because I think a lot of people might just say, oh, well, that's just not attractive. I'm not going to do it. Who cares if it's my brain cells?

**Mitch Clionsky:** I'm not sure if they said the last part, but it's like, yeah, let me see the evidence. There's actually two slides that I would show for this. The first one is a combination of his PET scans, his positron emission tomography scan before and after he had been on CPAP for a period of about a year, I think it was at that point.

And the before shows this downregulation of activation. Essentially, not much is going on in his brain. And we presented this at The Alzheimer's Association International Conference, I think in 2012. The second test was done, same guy, same machine, but after he'd been treated for a year and suddenly now, going along with the fact that his thinking was better, his test scores were better, his activity was better, his wife said he was better, his brain now is lighting up all over the place.

**Emily Clionsky:** And he went back to writing poetry and wrote his, and published his first book of poetry.

**Mitch Clionsky:** What else happened the same year, 2012, that I just discovered this last year, is there was a very small paper that was presented in a journal on sleep, that showed the difference in beta amyloid levels in someone treated with

CPAP. Where their beta amyloid levels, those glumpy kinds of proteins that we're trying to remove with expensive medications every two weeks with a diffusion these days. The new one, Donanemab, I can't remember, Xgeva or something is, is the brand name. Those actually, decreased substantially in somebody who was treating their sleep apnea.

So, it's another piece of this puzzle because we know that when people have losses of oxygen acutely, like in heart attacks, the level of the beta amyloid goes up in the hours after that. And so it all makes sense that this would fit together. And now we're actually, there's this case study showing how treating this, using that kind of imaging, shows a decline in their amyloid levels.

Unfortunately, none of the pharmaceutical companies are paying attention to this. Which is a shame because it may be what's explaining some of the response to medication.

**Emily Clionsky:** Or the lack of response to medication.

## Exploring the Placebo Effect

**Carmen Hecox:** Well, you know, I've been taking, and this is not the exact one that I've been taking for over 20 years, but it's this, I don't know if you can see it.

**Mitch Clionsky:** What Phosphatidylserine, Phosphatidylserine

**Carmen Hecox:** Phosphatidylserine I'm going to sabotage it, Phosphatidylserine. Well, I used to get it from a vitamin store, it was called Neuro PS. I started taking it when I started going to law school. One of my friends recommended it. He said it helps you retain information. It's a brain vitamin. And I remember when I used to buy the other product that I can't no longer get. They used to say that studies were done with people that had Alzheimer's and it showed that it, slowed down the progression of Alzheimer's.

**Mitch Clionsky:** Shame that no one published that.

**Carmen Hecox:** They had a book. I remember that particular vitamin store had a book that they had, It was like, I don't know, like 14 page book about their studies of using this particular product on people with, cognitive issues.

**Emily Clionsky:** So, here's an important difference between, with all due respect to whoever that store was that published or sold or gave away that 14 page book with the information in those pages versus the information that's in our book. We did a lot of work with patients. We did a tremendous amount of research in all different specialty areas. That we could get our hands on across the world, available through the internet, plowed through that, and we only looked at the data that was statistically valid, that was well done science, that was reviewed by the world's experts in that area. We call that peer reviewed, and then was published in highly respected scientific and medical journals.

So when we, and in fact our book itself, to get it published by Johns Hopkins University Press, we went through a series of peer review processes with J. H. In all likelihood, that 14-page handout that was in that store did not meet that same criteria. So, we can, you as a lawyer, know that people will believe almost anything so long as they find it on black ink on white paper.

Put something in black ink on white paper and give it to somebody to read and chances are you're going to find somebody to believe it. The reality of its reliability and accuracy and reproducibility is something completely different.

So, we went through the stringent criteria we went through for something to make it as a factor into our book was that it was really widely accepted in by major experts had bodies of research behind it that substantiated every single one of those factors that we targeted.

**Mitch Clionsky:** And in fact, there are a lot of studies that come out on small sample sizes that never get replicated.

**Emily Clionsky:** Every day of the week.

**Mitch Clionsky:** And they'll find that, you know, this supplement, this particular fruit, this food showed a benefit on one test out of perhaps 12 on this group of people. What they don't explain well enough in those, unfortunately, is that if you do 12 tests, the chances of one of them being positive just by chance is actually fairly high and that it needs to be replicated on another group and then expanded to larger samples for it to be something that you could bank on.

But if you get that kind of positive thing, you can then say, cause this stuff isn't usually regulated by the FDA. You could say it supports brain health and you can

sell it. There's a ton of money to be made in this area. And part of what we also know is that when people take something, then especially if they have to pay a lot of money for it, and it's a little hard to get, and they don't get any problems by taking any side effects that oftentimes they do feel better and they do focus better and they do have more energy. It's something that's called the placebo effect and it's very powerful. It's really something if you can harness placebo effect, I call it Dumbo's feather. I don't know if you remember the old Disney movie where Dumbo the flying elephant. He's flying around, he's got this feather in his trunk. Jiminy Cricket's up there in his hat. And at one point, he drops the feather. And he says, I can't fly I dropped my flying feather. And he goes crashing down to the floor of the circus. And Jiminy Cricket's telling him, flap your ears, flap your ears. It's not the feather. And sure enough, he does and everything's fine. But I feel the same way about a lot of things.

And I like the fact that people feel better when they take something, because as long as it's not doing any harm, why not? It's good for them to feel better. And if it gives them that focus that they can go in and take their bar exam and do better than worrying about how they're going to do, I think it's great. But that may be the category that falls into. It's

**Emily Clionsky:** The placebo effect, for instance, is so strong that when the FDA has to approve a new antidepressant drug, they basically discount 25% of the improvement in the depression scores from the group that was actually given the drug versus the group that was given the control, the placebo.

**Mitch Clionsky:** Because everyone rates themselves a little better six months later or three months later.

**Emily Clionsky:** Automatically.

**Mitch Clionsky:** Yeah.

**Emily Clionsky:** 25 percent of the effect that we get out any medication, it doesn't matter what it is, it's coming from placebo.

**Mitch Clionsky:** And sometimes it's very legitimate our own body's endogenous release of chemicals. You take a couple Tylenol for a headache and within a matter of minutes, oftentimes you start feeling better. Well, that hasn't even had a chance

to digest. What's happening? Well, we're starting to pre-release some of those endogenous endorphins. So, it's good stuff.

**Carmen Hecox:** And that is true because sometimes I'll have a headache, and I'll go downstairs. I'll grab some Tylenol I put it here on my desk and I'll say I'll take it right now, but right now it doesn't happen. And then I'm like, my headache's gone, and I looked down, I'm like, oh, there's my Tylenol. I'm like, oh, it's magic.

**Mitch Clionsky:** It is magic. Good magic though.

**Emily Clionsky:** So, in terms of all those supplements, forget the Prevagen. Forget all those kinds of things. Not worth spending your money on.

**Carmen Hecox:** Yeah.

## Exercise and Lifestyle Changes for Cognitive Health

**Carmen Hecox:** So, tell me, as I mentioned before, brain fog, that's something that women go through. So would you say that perhaps some of that brain fog could be alleviated if women went out and got a sleep test. And maybe the brain fog wasn't, estrogen related or, you know, we're all getting old, but maybe it's not that it's just, we're not getting enough sleep or we're not getting the quality sleep that we need.

**Emily Clionsky:** Or it could be a combination of all those things. It can be all of those factors working together, which is what's more likely. It's not just one thing, it's the combination effect and it produces a synergistic a problem. So yes. If you don't want to take estrogen, I get that completely. Get the obstructive sleep apnea diagnosed and fix that.

If you've got problem with depression, and you may want to consider taking an antidepressant, have the obstructive sleep apnea looked at, but I'd also advise somebody to start exercising on a daily basis because we know that exercise is going to affect depression. In fact, as much as an antidepressant will when we look at the relative benefits.

So, Mitch spends a lot of time getting his patients to change their behaviors. And there's a whole science behind that. But the one thing I would advocate for women who are potentially lazy as I am, I have been a slug my entire life. I hate to sweat. I don't like being hot. I hate exercise. But the one thing I've absolutely learned to adopt, and my husband got me to do it, was I started with 10 minutes a day and I now build up to 90 minutes a day on a stationary bike. And it is absolutely critical.

**Carmen Hecox:** That's great.

**Mitch Clionsky:** So, when you're talking about how to get people to start doing, because a lot of us become very sedentary. Because we're busy, because we just don't have the time or the motivation. Of course, the less you do, the less you want to do, and the less you can do, because now it hurts, or you're unsteady, or you're afraid you're going to fall.

So, our formula for getting people to exercise is real simple, take a 10-minute walk. Do it three times a day. You'll see that in the book. And here's why this works; suppose I gave you an apple and said this is the best apple you ever wanted to eat. It's incredible, specially formulated apples, but you have to eat it in one bite. You'll look at me and say I don't know, I don't think today's the day for that, maybe tomorrow. Well, same thing with exercise. I don't care what kind of exercise program you devise for someone, what equipment you buy. Some people say, oh, I got the best bike. I got the best this. I got the best rowing machine. I belong to this place where I can get great classes. It's gorgeous. So yeah, but are you going? Well, not really. So, you can't eat in one bite. You have to nibble. And that's why the 10-minute walk really works, because you don't need a lot of equipment, you need a pair of shoes. You can do it pretty much everywhere. There are some places where it may get too hot or too cold, but still 10 minutes oftentimes is enough that you can tolerate it.

If it's raining, you're not going to melt. You're not going to hurt yourself. You're going to find your way back home again, in most cases. And it builds up, it's cumulative. So those 10 minutes, three times a day are 30 minutes, 210 minutes a week. If you walk in fast enough, if you're walking briskly, which is defined as walking quickly enough that your heart rate goes up, but you can still talk. You're not going to walk about nine or ten miles a week, which ain't shabby. And you can then double dip. You can use that to catch up on your messages that you're listening to. You can make a phone call. You can listen to a podcast. You can listen



to music. Call someone that you haven't spoken to just to say hi, make a social connection.

What you're doing there is you're sort of double dipping with your exercise by combining it with social connectivity, both of which are really critical to beating dementia. So, what's stopping you becomes the question.

**Carmen Hecox:** Yeah. And I know another thing that you, in your book, you talked about the social connection, but you also just talked about breathing clean air. You know, it's important. Go out, breathe clean air, get out in nature. Very important.

**Mitch Clionsky:** Yep. Of course, for some people that's harder than to do than in other places.

**Emily Clionsky:** Especially if they live in LA.

**Mitch Clionsky:** Especially if there's a forest fire going on. There actually is a risk that's recently been published by inhaling secondary smoke from forest fires. I feel badly for you guys in California because

**Emily Clionsky:** Increases the risk of dementia, which is not surprising. We know there's a direct connection between our lungs, our heart, and our brain.

**Mitch Clionsky:** So maybe wearing those COVID masks when you're just walking outside and there's a forest fire in the area makes some sense.

**Carmen Hecox:** Yeah. Oh, that's what I was going to ask you

## COVID-19 and Cognitive Effects

**Carmen Hecox:** . Have you noticed, because I got COVID last year when I came back from Hawaii. And I noticed that after I got COVID, you know, after all the horrible symptoms went away, I have like this brain fog. And I'll be honest with you, that brain fog took me several months.

I mean, like four or five, maybe six months shake off. Have you guys noticed any correlation in people's cognitive issues after getting COVID?

**Emily Clionsky:** It's well documented that depending on how fragile the person is to begin with and how severe, a case they developed, that COVID can have long term effects on somebody's cognition. It's been demonstrated in good research that's been done. The more common effect that we tend to see and what people don't appreciate, is that when you do have a virus, that virus is making changes to your genetics, and the effect of that is releasing all kinds of chemical transmitters in your body. Cytokines, Chemokines, and they can actually affect the way your brain works and the way your muscles work. So that fatigue and that heaviness and that feeling like you're thinking through mud sensation, is very much a side effect of the effects of the illness and the virus with which you were dealing.

**Mitch Clionsky:** It's a real thing. Fortunately for most people, it's sort of like concussions the acute symptoms go away. There is that miserable minority of people, however, who can end up having these problems for all we know into the future indefinitely. But for most people, it's a transient kind of thing. And we also want to guard against their becoming secondarily depressed, where they lose hope.

They stop doing, they don't exercise anymore because it's too fatiguing and they pull back from a lot of things. So sometimes the secondary effects can be almost as disabling as the primary effects.

**Emily Clionsky:** A lot of people weren't aware of this kind of effect until so many people in our population had COVID. So, it was really stuck underneath our noses. But well, before COVID hit, we knew that about 30 percent of people ages 30 to 50 years old who were hospitalized, in other words, they were seriously sick enough, with a pneumonia, a community acquired pneumonia. Your average garden variety pneumonia, if they had to go to the hospital, one year after that hospitalization, these people had quantitatively objective measurable decreases in their cognitive ability. So that's an average pneumonia, not even COVID. So, this kind of effect is true of a lot of diseases.

**Mitch Clionsky:** It's funny that you called this when they first started with the COVID pandemic. Emily says yep, we're going to be seeing a lot of people with subsequent cognitive changes because of this virus and the way it's transmitted.

And the fact that so much of it goes up through your nose, as well as affecting your lungs. And because of the, increases in your body temperature, it's just, we're going to be seeing this cognitively and you were correct.

**Emily Clionsky:** Thanks, honey.

**Mitch Clionsky:** As usual. I always say that.

## Resources and Future Projects

**Carmen Hecox:** Yeah, so where can people learn more about the work you do?

**Mitch Clionsky:** So, the most immediate place to learn is by going to our website, which is called [BrainDoc](http://BrainDoc.com), B R A I N D O C, just like it sounds, BrainDoc.com. You'll see some information about each of us. They will see some information about various things that we've published. They will see links to about 40 plus podcasts, none as good as these, this one, but okay, they're good enough. And a link to purchase our book if they want to. Our book's available in a lot of bookstores, but also directly on Amazon, so you can get it in a day or two. You can download it onto Kindle today. You can get it also on audiobook. Because it's very nicely narrated, and we didn't do the narration. An actress did that and she's incredible. You can also get in the library. I have no problem with stating people because we're really excited when we find out the Vancouver Public Library has like 12 copies of our book. That's really cool. So, I know there's a couple places you wouldn't think and it's like, wow, they've got that many copies. Other places it's on interlibrary loan.

The other thing that's going to be very interesting, I think, is that we have on our website a dementia prevention checklist. Now you see it in the book that explains it, but you can also use the QR code in the book to get to our website, or you can go directly to the website and go to the [checklist](#). And it's 25 questions that will give you basically a whole profile of your individualized dementia risk. And then steps to take to mitigate the risk. And we're coming out by the time this podcast airs, we will be able to have this available in a format that people can see a whole picture of where they're on target. Where they're near target and where they're off target as well as a table for each of these an Individualized kind of plan that they can use to really actively reduce their risk. Which is for us really exciting because we want this to be something that people use, not just read and say well. That's interesting.

We want them to say I'm going to do something now I want to reduce my risk. So hopefully this will get the word out and people will go there BrainDoc.

**Carmen Hecox:** And I always ask my guests this, what future projects are you currently working on and when will we expect to see those amazing new projects?

**Mitch Clionsky:** That is a multi-million-dollar question for us. Because we got four irons in the fire. Emily wants to do another book.

**Emily Clionsky:** I want to do another book.

**Mitch Clionsky:** Starting with prenatal protection against dementia in our children.

**Emily Clionsky:** Dementia proof your baby, your child. Because it can start that young.

**Mitch Clionsky:** I want to do workshops and talks that are going to take this to people who can use it today, rather than waiting for that child to grow older.

So, uh, hopefully we're going to continue. We're doing a variety of talks in various venues. By the time this comes out, we'll have done a talk in Philadelphia and a couple in Virginia on a tour that we're doing in September. I don't know. It's, uh, it's, it's exciting.

**Carmen Hecox:** I will say again, I said this off air, I loved your book. I mean, I could not put it down. I sat there and I read, and I read, and I read and my daughter's like, what are you doing, mom? Because I have the digital copy and so I've been reading it on my screen. At first, I thought it was going to have a lot of medical terms and it was going to be dry. But it wasn't it was so interesting. And of you guys explained it in a way that's easy for non-medical people to understand it. And I love that.

**Mitch Clionsky:** Great

**Emily Clionsky:** Thank you.

**Mitch Clionsky:** That was our goal.

**Emily Clionsky:** Thank you very much.

**Carmen Hecox:** So, thank you very much for coming on. I will post all of your information in the show notes so the people can know how to get ahold of you, know how to download this [checklist](#), and also purchase your book. I think it's a book everyone needs to read. Don't think that this is a book that needs to be read if you're in your 60s or 70s, I think this is a book that needs to be read if you're thinking about having children,

**Mitch Clionsky:** Mm hmm

**Carmen Hecox:** Because there's a lot of information there that I didn't even think of.

**Mitch Clionsky:** We'd actually like to see it in book clubs where people could read it and discuss what they're doing because we know that if you're telling someone else what you're doing to improve yourself, you're more likely to do it. And they'll give you feedback on it.

**Carmen Hecox:** I agree. All right.

**Emily Clionsky:** Thank you Carmen for very much

**Carmen Hecox:** Wow, what an enlightening conversation with Drs. Emily and Mitchell Clionsky. It's episodes like these that remind us of the power we hold in our hands, or rather in our heads to shape our health and future.

Thank you again to Emily and Mitchell for taking the time to share their combined 70 years of professional and clinical experience in medical and neuropsychology.

Remember, every step you take toward understanding and protecting your brain is a step toward a vibrant, fulfilling life. So why not start making those changes today? And don't forget to pick up a copy of Drs. Emily and Mitchell Clionsky book, "[Dementia Prevention: Using Your Head to Save Your Brain,](#)" and additional resources. I've added their links and more at [createthebestme.com/ep086](http://createthebestme.com/ep086).

Thank you for tuning in to create the best me. Join us next week for another inspiring episode, crafted just for you.

Until then, keep dreaming big. Take care of yourself and remember you are beautiful, strong, and capable of creating the best version of yourself. Thank you for watching. Catch you next week. Bye for now.