

# How sex hormones impact sleep

**Guest: Dr Margaret Christensen** 

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#### [00:00:10] Alex Howard

Welcome, everyone, to this interview, where I'm super excited to be talking with Dr Margaret Christensen. In this interview, we're going to be exploring the relationship between hormones and sleep issues.

Particularly, we'll be talking about some of the factors that can cause dysregulation in our hormones, things like environmental toxins, particularly mycotoxins, infections, and how really a toxic overload can cause our hormones to be out of balance, which has a major impact upon sleep issues.

To give you a bit of Margaret's background, an Institute for Functional Medicine faculty member for 15 years, as well as a certified Functional Medicine health coach, Dr Christensen first became interested in functional medicine 20 years ago when trying to solve the riddle of her and her family's complex health challenges.

Unbeknownst to her at the time, they were a consequence of severe toxic mold exposure. She became intimately familiar with chronic fatigue, fibromyalgia, autoimmune, hormonal, neurological and psychiatric consequences of unrecognized biotoxin illness. And Dr Christensen is passionate about educating her clients and colleagues about root cause whole systems medicine.

So, firstly, Margaret, welcome. It's lovely to have you back again.

### **Dr Margaret Christensen**

Happy to be here again, Alex. Great topic.

#### **Alex Howard**

It is.

### **Dr Margaret Christensen**

Number one issue that we deal with here in my practice.

### **Alex Howard**

Is that right? That's interesting.

## [00:01:51] Dr Margaret Christensen

Yeah, it's at the top. Sleep and getting adequate sleep is at the top of what we need to do to help everything else.

#### **Alex Howard**

Before I come to my first question, that's a really interesting point, isn't it? Because sometimes sleep is the issue that people come with, but often it's a symptom of something more fundamental, perhaps, that's going on. But without addressing the sleep, it's really hard to address what else is happening.

### **Dr Margaret Christensen**

Absolutely. Yeah.

#### **Alex Howard**

Let's start with, obviously, I knew you worked a lot with Steve. I didn't realize that this was such a common thing for you guys. In your experience, what are some of the key things that you identify as impacting upon insomnia and sleep quality for people?

## **Dr Margaret Christensen**

Well, probably the number one thing that most everybody's dealing with is just a level of stress hormones. The amount of adrenaline that they have running around their body that can't dissipate or that has turned on their limbic system, the fight or flight part of the body which is running unconsciously just gets stuck in the on position, so you're constantly dumping adrenaline for whatever reason, for whatever stressors.

Whether those are physiologic stressors and physical things happening to you, whether they're emotional things, whether they're traumatic things, whether, again, they're psycho spiritual things. Any one of those areas can trigger the stress hormone production. And then adrenaline, if you can't shut it down and you've got high cortisol levels at night, then that really is probably the major crux of why folks can't sleep. And so learning how to modulate and manage those is super helpful.

#### **Alex Howard**

Shall we talk a little bit about that relationship between hormones and I guess particularly also sex hormones, and how they are impacting upon both the ability to get to sleep but also stay asleep and quality of sleep?

### **Dr Margaret Christensen**

Sure. Again, whenever you're addressing hormones, you have to look at the whole big picture. So when I'm looking at sex hormones, I don't look at them by themselves. I look at them in the context of where your adrenal hormones are, your stress hormones, what's going on with your thyroid, because that also can be very impacted, what's going on with your insulin levels, that's your blood sugar pieces, because all of those things end up impacting sex hormones.

So in particular, and for women in particular, estrogen and progesterone are the major ones that are involved in the sleep cycle. And so anytime you have fluctuating levels, big fluctuations, and that can

happen right around the teenage years with the onset of menses, certainly during pregnancy and right at postpartum, you have these major fluctuations in hormone levels and also stress hormone levels.

### [00:04:54]

And then in the perimenopausal years as well, we'll see these big fluctuations up and down of estrogen and progesterone. Very tied to how much stress hormones you've got going on and insulin in your blood sugar and how well your thyroid is working in energy production. So understanding a little bit about the rhythms and some women, for example, will notice that right before their periods, they can't sleep.

And oftentimes that's because they don't have enough progesterone. Natural progesterone and they need to be making a little bit more. And so, again, when I'm evaluating somebody, I want to look at the whole big picture.

#### **Alex Howard**

I think sometimes, first I think what you're saying is really important, that sometimes the tendency is people can get very reductionistic and they can go, oh, my blood work shows that, in fact, some doctors do this as well, the blood work shows there's deficiency here, so let's just give that one thing. As opposed to looking at somehow some things being raised can down regulate other things. Some things are precursors. That there's quite a lot of complexity here, right?

### **Dr Margaret Christensen**

Yes, absolutely. Yes. So, for example, estrogen is also very involved in, again, helping to calm the brain and again get adequate sleep. So when you have big fluctuating levels of estrogen, for example, around perimenopause, when one month you make way too much and the next month you don't make enough, and or there are toxins in the environment that are competing with your estrogens, alcohol is one of them, and mycotoxins or mold toxins is another one that has a lot of estrogen effects, a lot of plastics, pesticides, etc, those are all things that can interfere with estrogen.

The enzymes that are processing those toxins are the same enzymes that are being used to help process your estrogen. So it ends up bumping the estrogens off and you get these fluctuations and it's in the fluctuations that can create a lot of the hot flashes and sweats or just waking up. Again, having adequate estrogen progesterone helps to tamp down the effect of the adrenaline on the body and the cortisol. And so if you're not having adequate amounts of those or you have such big fluctuations, that's really going to disrupt the sleep cycle.

### **Alex Howard**

I also think that sometimes there might be people that are watching this or listening to this that are thinking, oh, well, hormones. Having dysregulated hormones, having hormones that are too high at the wrong time or too low at the wrong time, it really can make people feel like they're going crazy. Right?

### **Dr Margaret Christensen**

Oh, my gosh. Yeah. My word. Yeah. So it's interesting because I see this all the time with Perimenopause. Women will come in here, horrendous hot flashes. They're waking up in the middle

of the night, they're soaking wet, and they can't sleep, and their mind is racing all the time. But this can also happen earlier in life. If you have super high stress hormones, they're blocking how your estrogen is being metabolized.

### [80:80:00]

And again, the high stress hormones will disrupt your sleep and keep that adrenaline going. And particularly if you don't have actually enough natural progesterone around, the natural progesterone has a nice, very calming effect on the brain and if you don't have enough of that around, then, again, you're going to see a lot of sleep disruption.

So perimenopausaly, these big estrogen and progesterone fluctuations, often not nearly enough progesterone and a lot of estrogen one month and not enough the next month, that's going to create a lot of problems. And then all these other toxins, like I mentioned, that interfere with estrogen metabolism are also something else. And then we can talk about infections in a minute.

### **Alex Howard**

Yeah. Also, before we go there, I think it's worth saying that, in a sense, sleep is a natural state that requires a state of hormonal balance in the system. And if something is too high or too low, it's interfering with that natural state from happening.

## **Dr Margaret Christensen**

Yeah, absolutely. And I'm sure you're having somebody talk about how important sleep is for the glymphatic system in the brain. So that is the lymph system that we have in our brain that helps the brain to drain the toxins from the day. All this stuff, you know, just really all that thinking that we do is actually generating byproducts that need to be drained, and that happens at night. So unless you're getting quality sleep at night, again, a lot of that toxicity is not draining, and that can be impacting.

### **Alex Howard**

So let's open up this area of infections, toxins. You already mentioned mycotoxins. It might be worth just explaining what those are, so we can look at some of these things that impact upon our hormones.

### **Dr Margaret Christensen**

Okay, sure. Again, if we're looking at environmental toxins, let's just start with things that make your adrenaline raise that are very easy to get rid of and to cut out. And the first thing I would start with is social media and television. Anything violent or intense that's raising your adrenaline while you're watching it, particularly any visuals. Folks have no idea that our body doesn't know the difference between watching something and actually participating and being there.

All the same hormones are being turned on in your body. So if you're watching stuff at night, even during the day, that's violent, that's really intense, that really makes you angry, stop. Because that'll help bring down the adrenaline. Now, some of the toxins that we're being exposed to, one of the first ones I mentioned, mycotoxins, is from toxic mold. Unfortunately, I'm an expert in toxic mold.

## [00:10:55] Alex Howard

It's not something anyone would want to be.

## **Dr Margaret Christensen**

And how did it start with me? I started again having night sweats and hot flashes when I was in my forties and I couldn't figure it out and I'm not sleeping and there's adrenaline going. But mycotoxins are incredibly common, so they are produced by molds from water damaged buildings. That's what I'm talking about. Yes, there's some in foods and all that, but I'm really talking about when we are breathing this stuff in.

But also just poor air quality in general. So again, living in cities where you have high levels of petrochemicals, high levels of pesticides, et cetera, in the air, poor air quality, high particulate matter, you're breathing that stuff in. The olfactory nerve, which is the smelling nerve, goes from the back of your nose directly back into the part of the brain that's called the limbic system. And it's bypassing your pituitary gland and inserting right into the limbic system, where your hypothalamus is.

## **Dr Margaret Christensen**

So the hypothalamus is the master regulator of the whole body. It's receiving all the inputs from everywhere in the body to say, yeah, it's okay to reproduce, it's time to sleep now, it's time to have sex, it's time to eat. That's what the hypothalamus is. It's time to poop. It's helping to regulate all that and it's telling your pituitary gland, okay, yes, tell your ovaries now make an egg, make some estrogen, you're going to ovulate and then you're going to make some progesterone.

## **Dr Margaret Christensen**

But what happens is, if this olfactory nerve is being inflamed and irritated because you're breathing in all this crap, and particularly mycotoxins, and all the crap that's in wet, damaged buildings, it actually sets that nerve on fire. It really inflames it and it's sending that signal, it's bypassing, it's going right past the pituitary gland and right into that hypothalamus in the limbic system. So you're sending the signal of, I'm irritated, I'm inflamed, I'm upset, and it can make you feel super anxious.

## **Dr Margaret Christensen**

It triggers the hypothalamus and it triggers the limbic system to go, uh oh, where's the tiger, is it going to jump out at me any minute? And then the hypothalamus has mixed up signals that go to the pituitary gland and the pituitary gland then has mixed up signals that go to the rest of the body. And the pituitary gland is actually what's sending the signals for hormonal reproduction. So that is how that's one of ways, just breathing in toxins can impact it. Then consuming them. Go ahead.

#### **Alex Howard**

Just to add to that as well, that different people will have different sensitivities. You can have someone in a household where one person is really severely affected and others may not be affected, which is why it's often hard to identify when this is going on.

## **Dr Margaret Christensen**

That's so common. And the reason being is because A, we have different genetic susceptibilities on how well our body detoxifies, how well we make antioxidants. Again, what kind of nutrition do we

have to support our bodies in a healthy way versus one that creates more inflammation, more stress hormones? So that's a big piece of it.

### [00:14:09] Dr Margaret Christensen

Again, genetically, some of us have better, or how we phrase this, some of us can detoxify better than others, or we need some additional support to be able to detoxify and also produce hormones. And so if you have, if your toxic bucket is already really full, you've had lots of multiple exposures to different things over time, you've had a lot of traumas, you've had a lot of high stressors in your life, you've had a lot of different types of infections, you've been on antibiotics, your ability to tolerate things like mold toxins or mycotoxins may be very small compared to somebody else who may have a lot more ability to be exposed and not express.

## **Dr Margaret Christensen**

And women, again, because we have a lot more complicated systems and a lot more interconnecting pieces, our hormonal systems are a lot more vulnerable to toxic exposures upfront.

#### **Alex Howard**

So that's mold and mycotoxins.

## **Dr Margaret Christensen**

Yes.

#### **Alex Howard**

Should we talk about other environmental toxins?

## **Dr Margaret Christensen**

Sure. Well, again, I think I mentioned a lot of the things like pesticides and the Petrochemicals that are in the air as well as in our food and in our water supply. I mean, all of those things we're consuming all that stuff, the plastics, the pretend food, p-h-o-o-d, that we have, it's not real food that comes out of the ground and growings got good microbes and some good soil on it. It's all this fake plastic crap that our body doesn't really know how to use. That is a stressor and a hormonal disruptor in itself.

### **Dr Margaret Christensen**

We're talking about genetic modification. That's probably one of the biggest challenges that we have. And, I mean, GMOs are all covered in glyphosate, which is Roundup. And other pesticides, all the pesticides have hormonal disrupting effects as well as neurotransmitter disrupting effects. So, again, if we're consuming all those things and being exposed to them environmentally in the air, no wonder we're having the hormone disruptions that we have.

## **Dr Margaret Christensen**

So there's plastics and Petrochemicals, and plastics are really derived from petrochemicals, so that's a big category. Another big category would be things like heavy metals. And certainly we know that a

lot of heavy metals comes in things like vaccines and that whole area and the narratives that we have been told around all of those are up for question and up for really deep diving into.

## [00:16:48] Dr Margaret Christensen

We certainly know that, again, heavy metals are very problematic and are common exposures. Again, we can see them being exposed in the air or the water or the food supply. But as well, in simple things like contact solution may have thimerosal in it, which is a mercury derivative. And that is also found as a preservative in a lot of medications, including the aforementioned medications that I mentioned. Those are common sources.

## **Dr Margaret Christensen**

And then the other things would be infections and chronic infections. Whether you're looking at viral infections, chronic what we would call vectorborne infections, that would be things like Lyme or its Co-infections or Epstein-Barr virus, that's the one that causes mono. So certainly we're seeing all kinds of hormonal disruption with COVID as well as with its purported treatment and prevention, which we know is actually creating more problems, hormonally in particular, than it has solved.

#### **Alex Howard**

And I think it's worth saying that when we're talking about the impacts of these different toxic infection loads on the system, there's the impact on hormones that we're talking about and the impact that has on sleep. But there's also a toxic load in of itself that's happening.

## **Dr Margaret Christensen**

Absolutely.

### **Alex Howard**

This is not the only impact that's important. It's just I think it's a really good way of demonstrating how these things then impact upon sleep.

## **Dr Margaret Christensen**

And then when we're talking about hormones from a functional standpoint, this is what we teach our clinicians, is that you start with the adrenal glands, so you start with addressing stress hormones and what can we do to help mitigate their impact and what's going on in somebody's life. And then you go to thyroid hormones. And the thyroid gland is really one of the most environmentally sensitive of the hormonal glands in terms of how quickly it's impacted and why we see so much thyroid hormone dysfunction going on.

### **Dr Margaret Christensen**

And things like heavy metals and infections really impact the thyroid. And then the sex hormones then impact your thyroid. So if your thyroid is messed up, that can also cause problems with either not sleeping enough or sleeping too much. And so addressing total toxic load as part of addressing stress hormones in the body can be part of helping sleep. But total toxic load with sleep includes, what's the crap that you're watching on TV?

## [00:19:33] Dr Margaret Christensen

Or on screen time? And I'm sure you've got somebody talking about blue lights and all of that. And what are you doing enough to give yourself nourishing uplifting positive thoughts in your head instead of constantly triggering your limbic system? More adrenaline, more adrenaline. More adrenaline, more adrenaline. I need another dopamine hit. I need to check my, and I'm guilty.

#### **Alex Howard**

You're not suggesting that mobile phones are addictive are you Margaret?

## **Dr Margaret Christensen**

Oh, not at all. Oh, they didn't know that.

#### **Alex Howard**

There's not a whole teams of people sat in Silicon Valley trying to make these devices more addictive.

### **Dr Margaret Christensen**

Yeah, right.

### **Alex Howard**

Sticky, as they like to call it.

### **Dr Margaret Christensen**

Right. Yes, sticky. I hope I answered the question.

#### **Alex Howard**

Yes, you did. We're talking about a number of different agents or factors here that can be impacting upon hormones. I guess this is also a good place to make an important point that, we touched on this earlier, but often the tendency in mainstream medicine is to go, oh, you're deficient in progesterone or you're deficient in testosterone, or whatever it may be. So we're just going to give you specific support for that.

#### **Alex Howard**

And of course, that has its place. But what you're saying is, if there's a toxic load, which is ultimately what's driving that, by just targeting that hormone, we're actually in some ways patching up something that then stops us from doing the work to really deal with the underlying issue.

## **Dr Margaret Christensen**

Absolutely. And that's problematic. So, for example, I don't give my ladies and men that we see here hormones until we've done a toxic load assessment. We have a little 10 day toxic cleanse program that at least I'll start somebody on prior to giving them some hormones. Now, sometimes if I got a gal who's really in the throes of perimenopause and she's having horrendous hot flashes and sweats and

she can't sleep and she's going crazy, then I may just give her a patch and a little bit of estrogen, give her some progesterone, just to tide her over until we can do all things.

## [00:21:52] Dr Margaret Christensen

My preference, however, is that we really work with opening up all the appropriate hormonal metabolism and detoxification pathways, which begins with gut health and then supporting liver detoxification, really supporting lymphatic drainage and including glymphatic from the brain so that the whole body is able to mobilize and then really nourishing the body with all the missing nutrients.

### **Dr Margaret Christensen**

Food is medicine. What can I say? You eat real food, real plants, having a plant based diet with having some animal protein, if that's what you'd like, but just making sure that animal protein is clean. Let's think about this. If we grow our animals in highly distressed environments where they're eating foods that create severe SIBO and bowel issues with them, which is what happens when cows are eating corn and they get really high stress hormones and that's what makes them fat, high stress hormones are making you fat, that's part of it.

## **Dr Margaret Christensen**

But we're eating that meat that has all those stress hormones in it and all those chemicals and toxins. So that's why it's so important if you're going to eat animal protein to get grassfed or range fed and just have less. Same thing for eggs, and try and get wild caught fish. But mostly plants and as much organic as you can and as much green things and lots and lots of different colors.

## **Dr Margaret Christensen**

All those phytonutrients help to support normal, healthy hormonal metabolism. They're going to decrease inflammation in your body, which is going to bring down your stress hormones. They're going to help your body detoxify, which is going to make it a lot easier to balance your hormones.

### **Alex Howard**

And in terms of identifying what's going on for someone in terms of toxic load, you mentioned that generally before you start prescribing hormones, one of the things you do is you'll put someone on an elimination, I guess, diet and environmental kind of eliminiation. But how much are you using functional testing in terms of identifying? So walk us through some of those strategies that you're using.

## **Dr Margaret Christensen**

Well, I'm getting baseline profiles in terms of blood count, kidney function, all that, but complete thyroid hormone panels. I'm going to do an adrenal stress index usually on somebody, at least a saliva test that's looking at five to six markers throughout the day of cortisol levels and their cortisol waking response. So I'll do at least a minimum, I'll do adrenal stress index and blood work, looking at blood hormone levels.

## [00:24:35] Dr Margaret Christensen

And if it's a woman, I want to know where they are in their cycle, when those things are happening. So I'll do that. And then I'll do functional testing for things like organic acid testing, which helps to identify your mitochondrial function, how well are you producing energy or not? It helps to look at your particular functional need for certain nutrients like B vitamins, like antioxidants.

## **Dr Margaret Christensen**

There's markers on there for things like fungal overgrowth and yeast, which is so common. You've been on a lot of antibiotics in your life, you've got candida until proven otherwise. And so we're looking for those markers. And then, again, so much of really approaching somebody from a functional integrative standpoint is getting a really good history on you.

## **Dr Margaret Christensen**

How stressed was your mother when she was pregnant with you? Were you breastfed or bottle fed? Were you born vaginally or a C section? What happened to you during your childhood? What traumas have you dealt with? I mean, all of those things impact where we are now with our hormones. And, for example, a lady's got PCOS, and she's got infertility issues. Again, I want to know about the stressors in her life, and I want to know about the toxin exposures, because that's often what triggers that.

#### **Alex Howard**

And in terms of testing for things like mycotoxins or looking at immune markers, what are some of the things that help?

## **Dr Margaret Christensen**

Okay, yeah. So for Mycotoxins, there's several different urine mycotoxin tests in several different companies. I tend to use real time urine labs, and then I'll also use the GPL labs. Vibrant also has labs out there. Sometimes I'll end up using both. There are a number of companies now doing environmental toxins. So if we have suspicions of high levels of plastics or pesticides or whatever, we can utilize those markers.

We do have lots of great markers now for immune system polarization. One of the things that we've learned since COVID too is that a lot more people understand now about the innate immune system and the adaptive immune system, although it's called T cell regulation, all the different ways that T cells go. So we can do testing that looks for that that can help us modulate or help us figure out which pathway we need to go down with somebody.

But if you have somebody who's waking up and if you have a man in particular but if you have a woman who's not menopausal, who's in her thirties and forties or younger waking up in the middle of the night with night sweats and hot flashes and like I said, men as well, the first thing I want to look there is infections. I'm looking for lyme, I'm looking for Co-infections, I'm looking for Babesia and Bartonella and those kinds of things. So that's specialized functional testing.

#### **Alex Howard**

And do you want to say a few words as well, you mentioned SIBO in cows, do you want to say a few words about gut function in humans as well and how that can impact upon hormones?

## [00:27:33] Dr Margaret Christensen

Oh yeah, it's so important. So, really, gut health impacts everything. Our immune system, our neurological system, our hormonal system. A lot of folks don't realize that really all of our hormones are being metabolized through the liver and into the gastrointestinal tract. You have to have good healthy bacteria in your intestines to metabolize your estrogens correctly.

Otherwise you end up recirculating estrogens all the time and then you get super heavy periods or bad cramps or PCOS stuff, goes on. PCOS is actually about insulin resistance. So, again, what all is in your diet or exposures that are mucking up your insulin? So those are the things that I'm looking for and going after.

#### **Alex Howard**

In a sense from what I'm hearing you say is that getting those foundational pieces in place is really important. And then you're doing more specialist functional testing which again is then opening up more specialist pathways in terms of how you're targeting those pieces.

## **Dr Margaret Christensen**

Right. Absolutely. Yeah. And I have to say that in both men and women I use a lot of natural progesterone. So one of the things that happens when we are, again, in this chronic fight or flight stress situation and or you've been taking synthetic hormone replacement therapy or you've been taking birth control pills or using one of the hormonal methods of birth control, what happens is we decrease the amount of natural progesterone that our body is producing.

And natural progesterone has a very calming effect on our nervous systems, our brains. It helps with sleep, it helps with brain repair and neuronal repair. It's actually been used in high doses, post traumatic brain injury. So I utilize natural progesterone a lot because we are not making enough. Oftentimes, if you're really super stressed, then we call it the Cortisol steal, you're flipping on and off different enzymes, so you're making more stress hormones and you're not making as many of the sex hormones as you need and particularly the natural progesterone piece.

So utilizing natural progesterone in women who are taking synthetic hormones like birth control pills or they're having, for example, an IUD, they have a Mirena IUD or even a copper IUD, I'll use natural progesterone in the second half of their cycle. And the same thing with women, perimenopausaly, I'm using progesterone three weeks on. One week off.

Premenopausaly is two weeks on, two weeks off, as if our bodies were making it. Perimenopausaly is three weeks on, one week off. And then postmenopausaly, it really just depends. If you're insulin resistant, you stay on the three weeks on, one week off. If you are slender and all that, you can stay on progesterone all the time.

## **Alex Howard**

And is it worth saying a few words for men watching in terms of testosterone as well?

## [00:30:35] Dr Margaret Christensen

Yeah, absolutely, the same thing. Also too low testosterone can really impact brain health and brain function and men have the same challenges as women and just these high stress hormones all the time and often just completely unconsciously running the whole system. And the men have the additional burden in our cultures of you're not allowed to express your feelings unless it's anger and so oftentimes just holding everything in and that's part of what raises blood pressure and all that. So that can really also disrupt sleep. So I mean, I have a whole list of things that I tell folks to start working on.

### **Alex Howard**

Yes, just to start to summarize a little bit, for someone that's watching this that is identifying with a lot of what you're saying, Margaret, and obviously if we're talking about any of these complex pieces, they're going to need to work with a practitioner such as yourself and your team.

But what are some of the really fundamental practical starting points, so the pieces that people watching can start to put into action straight away?

### **Dr Margaret Christensen**

Okay, well, the first thing is to try and get a little rhythm or routine in, that would be helpful. And I would start by if you're having insomnia, zero caffeine, zero alcohol. So here's the challenge that caffeine, both caffeine and alcohol are metabolized with the very same enzymes that are metabolizing estrogens and testosterone. And some of us do that better than others.

But the caffeine that you have in the morning can stay in your system for 18 to 20 hours. Caffeine works because it increases adrenaline. That's how it works. If you've had three or four cups of coffee to get you through the day because you're super tired when you wake up in the morning and then you've had a stressful day and you built up all this adrenaline and you're genetically a slow detoxifier and you can't get rid of it and by the time you get home, you're like this, and so you want a glass of wine or two or a whole bottle, what you don't realize though, is alcohol is, again, metabolized with the same enzymes that are metabolized in your estrogen.

And it's also impacting your sleep in three different ways. One would be, again, bumping off the estrogen and testosterone, and creating these fluctuations. The second would be, it metabolizes something called acetaldehyde in the middle of the night which is basically like poison to your sleep center. And the third thing, it's messing up your blood sugars.

So having blood sugar, big blood sugar, drops in the middle of the night, so you've had your couple glasses of wine or whatever for dinner and or sugar, and we can put sugar in the same category, your blood sugar goes up, but in the middle of the night it comes down. And when it comes down, the body's like, oh my gosh, my blood sugar's dropped. Adrenaline hits, boom. You wake up and you get your hot flash, you sweat, you gotta go pee.

I would say no alcohol, no caffeine. And the caffeine, I mean, people think that the alcohol is helping them, but it's not. And so that's a simple thing, I think, turning off all electronics, absolutely zero, nothing absolutely after 08:00 at all. Because the blue light stimulates your eyes. I already mentioned, do not watch any visuals or even listen to stuff that gets you amped up and that's going to stress out your adrenaline.

## [00:34:07]

You don't need to be watching bodies being blown up in the war and all of that. Well, I have a lot to say about what we're being fed also by the media very purposefully, to keep us anxious, to keep us from sleeping, all that. So don't buy into it, just don't do that. Things like a hot Epsom salt bath before bed can be super helpful. Having a little magnesium at night is also very useful. Having rituals at night of having something, you know, treat yourself like your own little six year old.

What would you do? When you give them a bath, they have a whole bedtime routine. You read them a nice book, you tuck them in, you sing them a lullaby. So that's the kind of thing you want to do for yourself. Have a real book, or if you have a kindle like a Paperwhite, but don't do it on your phone. And nice music, you can use essential oils. Lavender is very calming, Frankincense, very calming.

Have a nice little routine that you can do for yourself before you go to bed. And again, some progesterone. Progesterone is available here over the counter, like a topical cream. So you can always try that. And of course, exercise. And I'm sure somebody's talking about this but exercise, if you have a lot of adrenaline running around your body, your body says, run or fight. Run or fight. Fight, flight or freeze, which makes you go into depression.

So you want to dissipate that adrenaline. So move your body, whatever that means to you, up and down the stairs, doing a little yoga, going for a walk. You don't have to go to the gym. But moving every day and thinking about it as releasing adrenaline, I'm moving forward in life, I'm getting rid of all of this busyness can be helpful. So those are some simple things that I recommend.

#### **Alex Howard**

Fantastic. And someone that's watching this that thinks, I've tried everything for my sleep issues. I think you're someone who's a practitioner that works with a lot of complex clients.

## **Dr Margaret Christensen**

Yeah.

#### **Alex Howard**

When someone comes to see you that's perhaps despondent, they're frustrated, they feel like they've tried lots of things, it's not made a difference, what do you say to help bring some hope and some faith to someone who feels that way?

### **Dr Margaret Christensen**

That's a really great question. Well, one of the things I have them do is just keep a journal by their bed, and then when they're waking up or they're having trouble falling asleep, well if you have trouble falling asleep first of all, you do a gratitude list, all the things that you're grateful for, but then if you're waking up in the middle of the night, then you can ask yourself this spiritual question of what is awakening within me? What am I waking to?

And then having a journal and just doing a stream of consciousness writing. Now, Dr Christensen said I'm supposed to write something in the middle of the night here, and you want a pen that you can get a pen that has a little light on the end of it so you're not waking, you can even just write in the dark. You can just see what it looks like in the morning.

### [00:37:23]

What is awakening with you? What is your body trying to tell you? Dr Christensen started to tell me to just start moving my pen across the page here, and I'm just supposed to write about my sleep and why I'm not sleeping and this is really pissing me off, because I'd really rather be sleeping, and I'm tired right now. But you just keep writing, and you just keep moving your hand, and your body will tell you what it needs.

So I think that's simple. There's all kinds of wonderful meditation apps. I have folks go to Insight Timer. They have lots and lots and lots of great apps or great meditations and Binaural Beats and things that you can listen to, some nice music. You can do a whole body scan. So I think there's a lot of things that you can do. I tell people, you know what, if you need to take a nap during the day, just 20 minutes, just lie down for 20 minutes.

And then as we work with you and your distressed nervous system, then little by little, things will get better. I also use a lot of alpha-stim units. I don't know if you have anybody talking about alpha-stim. I don't have a unit with me. So alpha-stim, it's alpha-stim.com you can go to, is a special device that generates alpha waves. You clip it onto your earlobes and alpha waves are what you produce when you're in a calm, meditative state.

So they've studied that in all the monks who meditate a lot. So alpha waves are really good and the alpha-stim unit can be used to help with anxiety, depression, sleep, PTSD and pain. And we didn't even talk about pain because pain is a whole other reason that you may have some sleep disturbances and you can address that. And I use a lot of CBD and cannabinoids. It can be super helpful. Melatonin, a lot of anti-inflammatory things to help decrease pain. But the alpha-stim is one of those things that I can use, some of those more advanced ones.

#### **Alex Howard**

Yeah. Fantastic. Margaret, I'm mindful of time, but for people that want to find out more about you and your work, where's the best place to go and what is some of what they can find?

## **Dr Margaret Christensen**

Sure. Well, I have a website <u>margaretchristensenmd.com</u>, and I will be starting to do, in the new year in 2023, I'll be starting to do large groups online to help folks. If you are interested in individualized personal care, then my practice is called <u>carpathiacollaborative.com</u>. The Carpathia was the ship that picked up the survivors of the Titanic. So we have the Titanic of Western medicine just treating the tip of the iceberg.

So I have a fabulous group of very talented practitioners that we've all been training together for a long time. So, <u>carpathiacollaborative.com</u>. If you're really interested in the mold issues and mold and autoimmunity and what happens there, <u>molddetoxdiet.com</u> has resources for both the layperson as well as for practitioners.

## **Alex Howard**

Fantastic. Dr Margaret Christensen, it's always a pleasure. I really appreciate it.

# [00:40:41] Dr Margaret Christensen

Absolutely. Thank you so much for having me.