Introduction to cortisol and shift work

Hello and welcome back to the Beyond Infertility Summit. I'm your co-host, Dr. Carrie Jones. And today I am so excited to bring my good friend Kristen DeAngelis, who is a dietitian and functional coach, to talk with you all about cortisol, your circadian rhythm, and of course, what happens if you're trying to get pregnant, but you are a shift worker, night shift worker, swing shift.

Or maybe you're just a mama who's up at night not getting a lot of sleep. And how does that impact your fertility? So, Kristen, welcome to the Summit.

I cannot wait to talk with you about this, especially as you just had your own little baby and are feeling like a night shift worker yourself. Yes, exactly.

Thank you so, so much for having me here. So excited to talk on this topic. Well, fertility is absolutely your area of expertize, so I can't think of anyone better.

And especially, like I said, having just had a baby. Let's talk about your history and background. What got you here? What got you into fertility? Yeah.

So when I began as a as a dietitian, you know, I was working with outpatient centers and working with women, but I actually was dealing with my own personal health issues at the time.

So I was experiencing amenorrhea or loss of period for over seven years. And I had gone to multiple specialists and doctors, some of the best in the country, and no one could really figure me out.

I kept getting the same repeat, answer, shrug their shoulders. Everything looks fine when you want to get pregnant. One day will just give you hormones.

And I was like, Wait, what? There's not another answer here. There's not another root cause that I could look at. And so that's when I really got into going down the path of functional medicine and starting to work with Nutrition Dynamic.

Who I now I'm the director of Health Coaching today started working our process working on the root cause and I got my period back in three months. Wow. Which was wild, right?

Like after seven years unexplained, unexplained infertility.

Kristen's fertility journey and root-cause healing

And I just wanted to dove all in. And so that kind of is what brought me to wanting to really empower women to help them address whether it's their infertility or their reproductive issues, their period problems.

And so, yeah, I was able to conceive naturally and I'm four months postpartum and it's been a wild journey and I'm so, so blessed and honored to be in the position that I'm in to help other women. Now, today.

I absolutely love that. And as you and I were talking off air, we were talking, of course, about we are night shift workers, are swing shift workers. We love them. We need them.

Our mamas who are up with their kids, either breastfeeding or up just because of kid health stuff. And boy, they are feeling it. And when they feel it, a lot of it centers around cortisol and their circadian rhythms.

So I want to get into that a little bit. What is the circadian rhythm for everyone listening and then how might that impact health? Like what would that do to maybe throw somebody off work?

Their fertility could be at risk a little bit. Absolutely. So it really comes back to the circadian system is based on our 24 hour biological rhythms and it impacts really everything in our body.

Right. So it's mostly coming back to our light and dark cycle. So the light comes in through our eyes, our retina, and there's a light sensing protein, mellanox and that assesses this blue light.

Is this telling me to wake up, be active, turn things on, or is it assessing more of this like amber, orange, red light? Think of sunsets or campfires before we had all of the digital products we do today, and that would says, hey, it's time to wind down.

It's time to turn down the digestive juices. It's time to turn on melatonin. This is when cortisol should be the lowest. It is time to go to bed. And so when we have a disrupted rhythm.

So for our shift workers, let's say they're they're going in to their typical Monday through Friday. That's one type of shift work right there. They're looking at the sunset as they're driving in to start their day.

So they're getting this confusing signal. And again, what I like to kind of think of is unless like these mini factories or conveyor belts in every organ or gland in our body.

And so those are the clock genes, right? And the master clock is actually up in our brain. It starts in our hypothalamus, the super charismatic nucleus and the word.

But really it's the master clock that dictates those rhythms. But there's rhythms in our thyroid, in our pancreas to tell insulin, to release or not release in our gut and our digestive juices to say, hey, there's food coming down, we just woke up or we didn't.

And even with hormone production, right? So when we're looking at estrogen and progesterone, testosterone production and then of course, what we can talk about today more in depth is cortisol.

So we're getting a typically normally what should happen is when we wake up, we have the sleep cortisol rise. That's our cortisol awakening response up, the steepest rise we should get in the day.

And then it starts to slow down and it drops down during the day. It's lowest at night, and that's when melatonin turns on. But through several different cortisol testings, one of my favorite, obviously, the Dutch, I have to bring up with Dr. Carrie Jones.

We can see that there can be many, many different rhythms. Why that should be the rhythm that happens in a normal circadian response. We can see someone who might have a very, very low cortisol in the morning and it's really high at night.

So they might be feeling exhausted all day. But when it's time to hit the pillow, they can't fall asleep. Or it could be the person.

Circadian rhythm basics and cortisol patterns

And this would wear the shift work moms or someone who's having sleep disruptions in the middle of the night or sleep apnea or for whatever it is they're waking up in the middle of the night.

And what happens when we wake up? We have cortisol rise. We have and cortisol is a glucocorticoid, so our glucose rises. And I actually was doing an interesting experiment on myself, but I had a CGM and I have my ordering.

So I have all the biohacking data. I don't know if it's helpful or not as a new mom because I see how often I wake up. But what I saw is that throughout the night, the multiple times that I would wake up, the same time that I woke up, my cortisol spiked up, right?

Or my my glucose spiked up, my glucose and my glucometer spiked up. And so I know the cortisol spiked up as a baby. And so how is that throwing off the rest of the day during normal hours?

Well, it's impacting my insulin, my thyroid hormones, my steroid hormones, everything else in every other organ of the body. So when we're looking at reproductive health and fertility, whether you're trying to conceive or whether you're trying to optimize your hormones postpartum, it's really looking at from that function or model, how can we use light and dark to help optimize those clock genes in every organ of the body from our pancreas, our insulin, our gut health, our liver detoxification, our thyroid health, and of course, helping support our function when it comes to cortisone and melatonin.

My gosh, that's the truth. I want to go back to the CGM. So the continuous glucose monitor for people who don't know what that is. Will you briefly define that.

And then I wanted I'm going to get into that further with cortisol and things like ovulation, because I think that's going to hit home for a lot of people.

This particular talk on this Summit is around cortisol, shift workers, hormones, etc., but I think this is going to hit home for those. If you are one, identify as one of those women and you have PCOS or and you have metabolic issues.

This this is a good time to listen up. So if you could talk about the CGM, that'd be great. Absolutely. So we use a CGM in all of our patients, that Nutrition Dynamic, but a CGM as a continuous glucose monitor.

So you can just put it on the back of your arm. It's really simple and seamless and it assesses what your glucose is doing during the day. But if you don't have access to CGM, you can also pick up a glucometer at your local pharmacy.

It's anyone can do this and have this data. And what we're looking at is particularly not only fasted, what your blood sugar is when you first wake up in the morning, but after you eat your two hour postprandial response so your blood sugar might spike up, but is it coming back down?

So two things I'm looking for is I'm looking for stability. How big of a variance and my spiking up or dropping down. And then also typically I want it to be in the mid 80's all throughout the day, throughout the evening.

mid 80's is kind of our goal that we're looking at. And when we bring back to the concept of looking at our sleep and our circadian rhythms, we know that five consecutive days of sleep disturbances impacts our insulin sensitivity.

It decreases insulin sensitivity by 20%. So when we know that PCOS, for example, is our number one cause of infertility and the hallmarks of PCOS is insulin resistance, we have to come back and look at, well, asking the question, how is your sleep and wake cycles?

Are you waking up feeling refreshed? Are you waking up in the middle of the night? You know, a third of PCOS patients have obstructive sleep apnea and I think that is true.

Sleep disturbances are twice as likely in PCOS patients than not, so it's a big thing to really consider how are we supporting sleep hygiene and that circadian rhythm?

And as Kristen mentioned, you know, one of the one of the reasons that we wake up. So whether it's something wakes you up, you're listening for your baby, your dog, your partner has sleep apnea.

You have sleep apnea. As she said, your cortisol goes up and then your cortisol will cause your glucose to go up. It

is a natural response to protect you, except you don't necessarily need protection.

It's just your baby was crying or it's just your dog sort of barking, right? Like or like your partner is snoring. And and so you wake up and you get this blood sugar response when you have a client who is a nurse and EMT, a night shift factory worker, do you use a continuous glucose monitor on them as well?

Do you see these shifts in their blood sugar or do you find that they over time can accommodate for them depending on their schedule? It definitely depends on what their schedule is.

So for the nurse who has a monday through Friday night schedule, and that's just always their schedule, they're on, their glucose will typically start to even out and it's very much because they're waking up and going to sleep at the same time.

So we can usually help assess and support them as they go to sleep and as they wake up some more, like a biotech standpoint. But it's the people who have two days on, two days off, one week on, night shift, one week I'm day shift or it's for the shift work lifestyle.

So I have a client I spoke to yesterday and she's a musician, so she's she's up at shows until 3 a.m. on Friday nights and Saturday nights or that she's working her regular job Monday through Friday, waking up at seven and going to bed at 10 p.m..

Using CGM and sleep data to assess stress

So that's the one we actually just look at her CGM data and I'm seeing huge variances. I'm also looking at actually HIV data. I personally use the ordering.

I really like it because we can also look at temperature. So back to helping women look at their ovulation and helping her assess kind of her fertility health.

But back to HIV, I say, you know, I bet your HIV when you tell me all of these numbers, I bet they're in the twenties and thirties on Sunday, Monday, Tuesday.

And then the higher numbers you're seeing is Wednesday, Thursday, Friday, which is like, how did you know that? It's like you're you know, Jeannie is like, no, no, no.

I just know that Friday through Monday, your body is trying to recover from this weird waking up at 3 a.m. and it's just starting to get into the rhythm again and then you change it.

So it's that frequent change that really throws things off when we think about the cortisol and glucose response. And if you're if somebody is new to HIV, it's heart rate variability.

So the higher it is basically like the better, more resilient, less stressed your body is, the easier as you are to have to handle stress, the lower it is.

It's a really good indicator that things have not been good. You should probably take care of yourself. Maybe you need to rest. And I also I know affiliation, but I do also love the offering.

However, I know people listening have an Apple iPhone or Apple Watch or a woop band. There are other heart math, there's other ways to assess and HIV, if that sounds intriguing to you as you're listening.

All right. Now we have to go to ovulation. You were your night shift worker. Let's say you're the cortisol all over the place person. You're shifting constantly or you the night shift type lifestyle.

How does that variation in that your clock genes in when your cortisol goes up or down, your melatonin does or doesn't, how does that affect something like ovulation?

Yeah. So when we think about it again, that light and dark cycle and how it's perceived and coming in through the retina that as the super charismatic nucleus, the master clock that is going to activate generate, which sends the signals of LH and so that's going to impact our production of estrogen, progesterone, testosterone.

You know there's the clock read Mid-City also in the ovary is in the thick of cells, the granuloma cells, the helper cells that have to play all the role playing and observations.

So when we're looking at is starting to have a mismatch, there can be a missed signaling that that is then sent. So especially when we're looking at, for example, PCOS, which has a missed signaling, let's say the LH in a surge to actually release an egg.

That's when we start to see there can be quite a bit of an improvement when we start to regulate our rhythm, to try to regulate that activation and the signal that's being sent.

And I wonder how many people listening or how many clients you are with where they're let's say they're tracking their LH their luteinizing hormone, like an ovulation predictor kit or an LH strip or something, or they're trying to track for ovulation with mucus or temperature.

And they'll say This month and nothing happened this month, and you'll go, Well, how's it been? How's that stress? How's your sleep been? What's your job in like and the oh my gosh, it's been terrible.

I've been traveling or even crossing time zones. We haven't even mentioned that. But if you you know, if you took a big trip where you're like night and day got flipped, it's the same it's sort of falls under that night shift worker thing.

And how many times do they go, yeah. Oh, it's a terrible it's like the worst lately, you know, like. Well, actually, unfortunately, that ties hand-in-hand.

When we have to think about it. It's it's a stress on the body. Right. And I remember when I was looking at my ovulation data and we have to remember, too, that it takes 90 days for a follicle to mature.

So we want to think about what was happening. You know, was there some major jet lag happening two months ago? So there was a time where I went to Mexico.

It was really sunny. I was outside every day. I was, of course, getting like the really natural, natural rhythms, right, of waking up and falling asleep based on the sun rhythm.

But when I went back, back to Chicago, it was snowing. It was a blizzard for like two weeks straight. So not only was there a major stressor on my body from like a climate change, but also I was not getting outside.

I was inside and I wasn't getting exposed to the natural rhythms of that light and dark cycle. So what happened was, you know, you look a month, two months, even, sometimes three months out.

And that light, dark cycle, how it activated or shifted that signal could then affect your elation. You know, even up to three months down the line. Yeah. All right.

Well, the big question, of course, is what do we do? So if somebody is listening who is like, this is completely me, either through the new mom or mom up at night.

They're just like your musician, musician client, too. They have that night shift sort of lifestyle. They're an actual night shift worker thinking, This is absolutely me.

I identify. Where do you start with them? Yeah. So I want to think of like four buckets, right? There's light, right. Is always going to be our our biggest mover down river.

But then there's also food activity and mood, right? How am I managing my my stress? So first, we'll start with the

light piece. Anything that you can do to try to set, is it time to wind down or is it time to wake up?

So let's say for that musician, for example, who's going to bed at 3 a.m.

How shift work affects ovulation and fertility

as soon as she can get home, I want her to put some type of like amber blue blocking glasses on. I want her to shut off every single light cut all of it, the alarm clock as much as you can get it all out and then try to wake up.

I try to advise her not to sleep all the way into 1 p.m. the next day, I think try to get your your alarm clock within if you can, 2 hours from when you're regular morning wake up schedule is and this comes back to when you said jet jet lag and going over time zones our body really starts to have problems when it goes more than to time zones.

Right. So think about almost like that two hour. We don't want to go past the two hour time zone when we're waking up on the weekends or we're sleeping in or something of that nature.

Now for the wake up time. When we wake up, we want to be exposed to bright light within 30 minutes. Now I live in Vermont. It's dark, it's cold. I'm waking up and it's still dark.

So I got actually one of those light boxes and that thing is bright, but I swear it works so, so well for a lot of my clients, including myself, almost feels like a cup of coffee.

But really what that is, it's cortisol, it's that natural cortisol, weakening response. And so exposing yourself to that bright light first thing in the morning, that's going to be the best way to really set and reset the systems that we're trying to do for the food and activity piece.

We also what I like to suggest is asking yourself, when are you when are you eating? When you first wake up and trying to advise within the first 2 hours of waking to have your first big meal.

That can be another way to kind of set the rhythms for the rest of your body the rest of the day. It's also when we tend to be able to receive more food.

There's a little bit more of that insulin sensitivity in the morning. So whether I'm calling it morning or not, when you wake up, whatever that time is for you, eating something within 2 hours of waking, having a full spectrum light, and then trying to eat a little bit lighter in the evening.

And that's, again, to try to tell the body it's time to wind down. It's time to start preparing for bed and whatnot. I'm sorry, I'm going to interrupt you for just for a second.

I'm glad you said that, because I think, you know, if you're a strict night shift worker, I want to point that out again. When Kristen says morning, she means your morning.

So if your morning is 4 p.m., that's when you wake you get up at 4 p.m. to go to work at seven, then you're going to get bright light at 4 p.m.. You're going to eat your first big breakfast, big meal within 2 hours of waking.

Just so just follow. When she says morning and night, she literally means to your schedule whether you are on your day shift days or your night shift days, whatever is your morning is your morning.

So I'm glad you said that. I just wanted to point that out because I know that can get confusing where somebody might say, but I bet I wake up in the afternoon.

That's your morning. Yeah. Keep staggering. It's okay. Keep going. Keep going. Yeah. So but just always going back to what is your time schedule and think about light food, mood and activity.

Where are we also with activity, we know that those who are active end up sleeping better and having less sleep

disturbances within the night. So if I typically am recommending to get outside at least for a 20 or 30 minute walk every single day, and that can also help you to get the natural what is the natural rhythm of what's happening outside versus the four fluorescent lights that we're under all day or the blue screens that are in front of our face?

And if you can walk at night that way, you're getting exposed to that maybe sunset or some of those red tones that are happening in the sky. And when it comes also to having some type of closure, I think that walk can be somewhat of a closer to our day.

So when you get back from the walk, what are the steps that you're doing that allow you to not get in front of the computer, to not just jump back into blue screens if you're going to watch TV even?

Okay. Let's say you want to watch a show. Watch your show, but shut all of the other lights off. Don't be on your phone and the computer while you're watching a show and all the lights are on.

Shut off as many things as possible. Wear blue blocker glasses and then try to do your your clean up in the kitchen. You're washing the face, you're taking the shower after that show so that there's a buffer before your head hits the pillow.

So I always ask people, what is the buffer between being on and head hitting the pillow? So really like what? What's the closure for you? And there might be some other things that you want to put in there.

It could be some camomile teas, sleepy time tea, it could be a meditation, it could be again, just having like really soft, quiet music. You can literally set.

I know a lot of people have the Siri or the Alexa or different apps and whatnot. You can set a timer that every day at 8 p.m., put on meditation music or put on something so that it registers.

And it's not something that you can just shut off from an app.

Practical strategies for light, food, and movement

It's actually like a sound or the lights are dimming down. I know some of my clients have that in their house. Their lights were actually dimmed down at a certain time of day.

Wow, that is nice. Okay. With the walk, if somebody is again back to the night shift, do you change their walk at all? So for example, let's go back to the same example.

They wake up at 3:04 p.m. to get ready for work. Usually correct me if I'm wrong, usually I'll say go and take a walk. Go, go outside or in your house.

You got a treadmill or whatever you do. Get some movement in before you get to work at that light exposure and get going. And then but if somebody says, Well, I don't really have time, my job, schedule, kids, what have you, I'd prefer to do it while I'm at work, whether I can walk around the building or walk outside.

But it is the middle of the night or I can do it when I get home at 7 a.m., let's say. Do you give different advice for that? If they say, Well, I can't walk, but it's at one in the morning on my break or I can walk, but it's at 7 a.m.

when I get home is the walking part. You change anything in the walk part or you're like, No, movement is important, just get it right. I would still say that movement is important to get that best you can.

I mean, if we're if we're realistic, it's a matter of like, where can we fit it in? And I think it's better to get it than not. So just try to utilize light to your advantage in the other areas that you can.

So if you're going outside in the dark and it's I don't know when I am, I guess that you're walking outside, just try to make sure that you're having that full exposure when you're getting back in.

And then really, I think when you're getting off your shift. So for a typical shift worker and they're getting off their shift and it's 7 a.m. and it's bright have blue walker glasses as you drive home.

So when you leave the building, put something on so that it has that amber glow and you're not getting confusing signals that it's still really, really bright out.

Right. And then at that point, if you you get let's say you're getting off at 7 a.m., you do the exact same thing that Kristen just said. You're going when you get home, even though it is everybody else's morning, it's your night.

So you're going to start to do the wind down things. You're going to, you know, turn the lights down, keep the blue light blocking glasses on. You're going to have the music or do the meditation or do whatever you take a bath, whatever you do to have that buffer before your head hits the pillow and then sleep and complete darkness, even though it is other people's day.

Now, here's a question. You mentioned the person who's like two days on, two days off or two days on, three days off or what do you have them flip back and forth, this routine or especially if it's really irregular?

Or do you try to keep them to one routine or the other, meaning, you know, like, well, Kristen, I, you know, I am the three days on, three days off person.

So when they're. Right. Do I look at light only in the morning do I look at my morning. Do I just flip it based on if I'm on or off shift? How do I do that?

It's it is such a toss up and sometimes what I try to do is I really try to assess like, where is the where does the client feel best? And typically what I'll try to do is just try to really be strict on their nighttime or their their go to bedtime and their wake up time or try to be really, really strict there between one week to the next and see how they feel.

And again, looking at biomarkers like how is their HIV responding? How is their blood sugar responding? To be honest, it's one of the hardest that I will say to really assess and help.

I don't like to always resort to a pill or take those or take that, but I do find adaptogens are really, really supportive for those types of patients.

Yeah. And again, what I will say is we are always working towards the end goal to try to get it so that it's even a week on and a week off rather than two days and two days try to work towards where we can have either all night shift or all day shift.

Yeah, because it's just really hard on the body when we continue to look back. And our clients say that to I mean, they know it's hard, they're there.

Yeah, they're. Fully aware whether they're given this shift to not have a choice for someone really. Some people really enjoy their night shift. That's their preferred route, but they still know it's hard on the body they, you know, can feel it. So.

All right. Let's talk about that final bucket of mood. And because that can be done any time, no matter what your shift is. Yeah. And honestly, like, it's one of the most important things that I think we say the word mindset that we don't exactly know what that means too to work on ourself. Right.

I could easily just say check off the box and tell me that you meditated or you did a gratitude journal. But I'm talking like really dig into that. Really understand what are your triggers for your nervous system that put you into a fight or flight mode or to help you really rest and digest what pushes your buttons, what's your what's your coping style?

Right. You know, a lot of women who have this people pleasing say, yes, you know, lack of boundaries like that might be the area that you need to work on.

Even though we're talking about mood, I still classify that in the mood bucket because it comes back to how you're regulating your nervous system. So again, it could, you know, a walk or journaling could be your way to do that.

It could be working with a coach or working with someone to dove deeper into how you experience the world and how you relate to your nervous system.

Mood, nervous system regulation, and supplements

Or it could be starting to get into yoga or a spiritual practice, or really, again, anything that helps to support the nervous system from that really like somatic summer means body visceral sensation, how to calm body down and learn what your body needs.

Amazing, amazing. And to finish this off, I do want to touch on the supplemental side. You mentioned Adaptogens. And so if you can explain what that is.

And even though we all know that there's no magic pill to cure them all, I do want to touch on a couple just of your favorite, especially with those swing shift, night shift, the moms who are up at night like what could be supportive like that's kind of a go to for you so let's get let's go there.

Yeah absolutely. It's it's always a bucket that can just be really, really helpful and supportive. So one of my favorites, of course, is magnesium. I know I've talked to you about this quite a bit.

I feel like it's just a staple that I have in almost everyone's protocol to support sleep, specifically magnesium l-theanine can be really, really wonderful, but adaptogens and we're looking at Adaptogens Adaptogens means it's helping the body to adapt.

Whether you need help having more energy or you need help winding down, think of it as a natural balance. So Ashwagandha is one of our well known favorites when it comes to this space.

So Ashwagandha is a really wonderful one that I like to utilize. There's other ones too. So Rhodiola you'll throw. We can also utilize some more of like the Chinese herbal type of medicine.

So it could be, could you be or should Sandra or again some of these that are helping to adapt the body, wind it down at night or you might need something to again kind of raise that in the morning.

There's a couple other things that I like to use sometimes, too. Cordyceps. Mushrooms can be really great for the immune system, but it also has that natural energy component.

So sometimes I'll put that for me. It's time to wake up aspect. And again, I really like using Adaptogens for the typical night shift person rather than glandular.

So sometimes when we get a cortisol test back and we see that cortisol is really low and we think, okay, and again, there's a time and a place and I love grand juries, but when I'm working with a shift worker, I'm usually opting more for the Adaptogenic supportive supplements than than a glandular, you know, bovine adrenal glandular for for helping with their cortisol actually.

Can you explain glandular loss for people who are new to this? Absolutely. So a glandular is taking our actual tissue from an animal that is from the organ that we're trying to support.

So when it comes to adrenal glandular adrenals are what produce our cortisol. And so if someone has really low cortisol, we may want to actually help supplement with that glandular or that tissue of the organ itself to help naturally help to revive our cortisol production.

Perfect. And I will say to that glandular is are not just for cortisol. There can be glandular. Yeah. That is very true. And also remember, as Kristen said earlier, she mentioned like chamomile tea, tea, sleepy time tea, which also has

a good wind down herbs in it.

Adaptogens. My other favorite is Holy Basil or tulsy tea. T U L S Y Why that's another favorite of mine. And again that goes in the wind down whatever part of the day that is for you bucket and you can even take Camomile as a supplement or tincture.

You can take Tulsy as a supplement or a tincture if you're not exactly a tea person. But making tea is sometimes that nice buffer as she talked about before your head hits the pillow just to signal to your body like Pavlov's dog.

Oh, it's my camomile time. I know. I'm going to go to bed soon. Let's start shutting the systems down and not have high cortisol. It's like not be an adrenaline fighter flight.

Let's start winding down. So I love that you said that earlier. And that's a great point, too, that just when we think about the Pavlov's response, it's the action of creating the tea, but it's also the smell.

Closing thoughts and resources

So if you can think about scent and also sound, so the sound of coming music, the smell of the caramel tea, but you could also use essential oils. I really like using like a stress blend or a lavender for the evening where you might use more of like a peppermint or eucalyptus in the morning.

So scents can be really helpful as well. Perfect. Oh, yeah. Amazing. That's such a good point. I love that. Well, thank you so much for being on the Summit today.

Tell everyone where they can find you and about the the free e-book that we have for them as well. Yes. Amazing. Well, thank you again for having me on.

You can find me on Instagram, kdwellness. You can also find our company, our Health Coaching Company. We do one on one services. So if you're interested in my trying to conceive program, some of my period health programs, that's through Nutrition Dynamic Nutritiondynamic.com or Instagram and yeah, we'll be having the first chapter from the Trying to Conceive e-book that we'll be giving away with this Summit.

Amazing. Well, Kristen, again, I always love seeing you. I always love talking with you. And this topic is really not talked about that much. I think we as much as we need and love our nightshift workers, they get forgotten about and they are struggling just as much.

So I'm really happy. We got to have you in to talk about this topic. Thank you so much. Yes, thank you. Thank you for having me.