



999: Light and Leptin: Understanding These
For Hormones, Fertility and Health

With Sarah Kleiner

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Katie: Hello and welcome to the Wellness Mama Podcast. I'm Katie from wellnessmama.com, and this episode dives into some of my favorite topics, including light and how drastically this can shift our health. And then supportive to that, things like minerals, micronutrients, safety signals to the body, hormones, and so much more.

And I'm here with Sarah Kleiner, who, as you will hear immediately, is an absolute wealth of knowledge when it comes to all of these topics. And we go really deep, especially on light and leptin and how these impact our hormones. How they can really impact our thyroid, our fertility, perimenopause, and so much more.

And Sarah is the creator of the MyCircadian app, which I will link to in the show notes, as well as a board certified applied quantum biology specialty with the American Naturopathic Medical Board. She has completed coaching certifications in quantum biology as a certified nutrition coach and from the National Academy of Sports Medicine,

and has also completed the new biology curriculum with Dr. Tom Cowan. She has over 14 years of experience working within all of these topics we talk about today. And her goal, as you'll hear, is to shift the paradigm when it comes to circadian rhythms, health, nutrition, and light. And she gives a tremendous amount of really actionable tips in this episode today.

So without any further wait, let's jump in. Sarah, welcome. Thank you so much for being here today.

Sarah: Thank you so much for having me. I've been listening to your show for a really long time, so I'm super honored to be here and excited to chat with you.

Katie: I'm excited to learn from you, especially because you have so much knowledge on a topic that is a for sure favorite topic of mine, which is that of light and especially natural light and how much of a benefit it can be to, in my opinion, almost every aspect of health. And I love that you also bring into this the conversation around leptin, which I've never covered in depth on this podcast, but which seems especially relevant to any conversation involving hormones, fertility, perimenopause, menopause, women in general.

And I feel like this one doesn't get as much talk as even cortisol, which is seemingly having its, you know, moment in the sun on Instagram. So I know this is a massive topic and you could probably teach a masterclass for 12 hours. But to start broad, can we jump into, maybe give us some background and overview of, kind of the light cues that the body depends on, especially women in particular. And then how this interplay with leptin as well as what leptin is for anybody who maybe is not familiar with that.

Sarah: Yeah, I mean so much of, and I know you've had some wonderful people on your podcast that talk about light before. But what a lot of people don't understand is that all of our hormones are circadian. And you mentioned cortisol really having a moment on Instagram. Cortisol, melatonin and leptin are three master hormones that are very much controlled by light. And of course, melatonin by darkness. And if your body's not getting the proper signals, then these hormones really can't do what they need to do because they impact all of the downstream hormones. And so leptin wasn't even discovered until 1994. And what I tell people is that, you know, they studied it.

They found out about it. They found out about this hormone in 1994, and they studied it, and they were trying to do everything to manipulate it because they saw how it impacted so many systems. There is a ton of scientific research that has been done on this hormone. But the reason why most people have still never heard of it, doctors don't test for it, and you won't really hear a lot of people talking about it, is that they were never really able to

manipulate it with a drug. Or by injecting more of it like they do with insulin. And so it was just kind of pushed to the side even though it was studied.

But if you look at the literature, it impacts fertility, endometriosis, hot flashes, PCOS, the immune system, bone health. We have leptin receptors in the gut. I mean, the implications of this hormone are far reaching, and I think the most interesting thing about it is that it's a light hormone and that you really, the best way to manipulate it or get it into healthy range is going to be diet and lifestyle, which is, you know, a boring topic for a lot of people. But that's what I love about it, is that it's really highly modulated by light nutrition in our environment. So yeah, I can't really out supplement or take a drug to fix it, honestly.

Katie: I love this, and it seems like in a lot of years now of, kind of, being in the health and wellness world, I've seen this sort of almost full circle thing happen where we identify these things and then they don't really get reached the mainstream because they're not profitable to big companies. However, like if, if I've learned one thing in all these years, it's that often the things that are inexpensive are free, that we all have access to, but that are not, like you said, they're not sexy, they're not fancy, they're not shiny new objects, they're consistent daily boring things make the biggest difference over time.

And like I said in the beginning, light is one of my favorite topics because it's been so life-changing for me because I think certain aspects of light have gotten totally, you know, there are misconceptions around it. They've gotten a bad, like sunlight's gotten a bad name. I think very unfairly. And especially, I love that you said these are light sensitive hormones or light controlled hormones. I think even that mental shift into understanding just how much light can impact our hormones is a tremendous tool for women. And I see all these women wanting to like lower their cortisol, which I think is as a blanket statement maybe problematic to begin with. because you might actually already have too low of cortisol depending on what's happening with these other hormones.

But I don't see women really understanding leptin. Like you said, it wasn't really studied, it's not commonly tested on most panels. And it's something I've been testing on myself the past couple years, but not even really talked publicly about. So I'd love for you to kind of define for us. If someone does get a leptin test, what kind of range do we wanna aim for as women, especially, like what would be ideal and what does it mean if we are low or high that we need to be aware of?

Sarah: Yeah, so this is, I actually came into leptin testing when I was dealing with trying to get pregnant with my son and being told your labs are normal. Your labs are normal. And I discovered all this information about leptin and how much it really, really impacted fertility. And I had been doing, and I find this with a lot of clients, had been doing carnivore diet,

which was great for about the first year. And then that second year, thyroid took a huge dip, hormones took a huge dip. And I was basically told you're going into menopause at age 40. And when I tested my leptin, it was actually low and so when, and I had 30 pounds extra. You know? So, typically if people will say, oh, your leptin is elevated, that means you're automatically gonna have the extra body fat.

But that's not always the case, and it's not always the case for a lot of women who've yo-yo dieted, cut carbs, done a lot of fasting. They still may have the excess weight. So there's not a hard and fast it's always gonna be elevated if you have extra body fat, it's always gonna be super low if you're lean. I've had a lot of women with autoimmune conditions that have elevated leptin and they are very perfectly healthy weight. So when we look at the lab ranges, I'm always more interested in the symptoms that the person is having just to kind of qualify that. But for women, the range I look at personally, and a lot of people will say this is a really tight range, but I love between 7 and 10. Anything really below a four for a woman, I'm gonna say that's probably way too low. For men, you can get away with much lower 'cause men have lower body fat. They don't have the same hormonal system that we do. So between a zero and a four for men.

And I have seen men go into the negatives. I have seen women go into the negatives as well, which I didn't even know was possible until I started working as a practitioner, really looking at this for people. And I think it's important that you also look at other markers, fasting insulin, CRP. I like a full vitamin D panel. I like to look at triglycerides. I like to look at other metabolic markers just beyond, you know, full thyroid panel, antibodies, just beyond leptin. But leptin can kind of give some clues as to what the nervous system is doing, what the body's doing. And the kind of information, because I look at leptin as like this accountant. And it's taking information, it's sensing the energy of the environment, and it's giving directions to the thyroid, to the metabolism, to sex hormones.

Is it safe enough to make a baby? Is it safe enough for us to have a healthy metabolism and metabolic rate? So it really is like this command center in the brain. And when that is dysfunctional, you're gonna see a lot of downstream issues that manifest differently.

Katie: That makes sense. And to me this feels like it could very much be the missing piece for a lot of women. And like I've had fertility experts on before to talk about how, you know, fertility is a wonderful kind of metric to look at as an insight into our body. And if we're struggling with that, even if we're not trying to conceive, that's a great kind of message from our body of what might be going on. Like that's really relevant data. And especially for women who might want to conceive rather than sort of like overriding those signals that the body's sending, it's like learning from them, signaling to the body safety, giving it what it

needs. Like you said, to be able to be in a place to conceive and carry a pregnancy in a healthy way to term.

But even if we don't wanna have a baby at the moment, like that is such a valuable health signal. Like fertility in general, I think, you know, like that's one of the first things the body's gonna cut off if we're like not doing well. It's like the body's gonna say, okay, not time to make a baby if there's all these things going on. So I think it's such valuable data and like I said, I think this leptin piece is often a missing piece for women that we might not have even heard of or known to look at. Can you go deeper on the fertility aspect in particular, even for people who don't necessarily wanna conceive, but how this relates to, like you mentioned PCOS or to other issues that might be going on and what we can learn from that data and from understanding that.

Sarah: Yeah, I mean, it's really multifaceted. For women that are trying to conceive it is what she basically said. Does the body think it is safe enough? Does it have enough reserves? And leptin being this energy accountant for the body, if you're, in a sense, it could be nervous system, it could be nutrition, it could be micro macronutrients, it could be a combination of all the above. A big one because our mitochondria are circadian sensing organs and leptin and the mitochondria definitely have interplay with one another, if your light environment is off, that's a huge thing that I think is underrated for people. And leptin, like I said, is a light hormone. It's meant to dock to the brain at night when we sleep and to give this report.

You know, so leptin and melatonin have a relationship where they're really supposed to peak and be at their highest point at the same time. And so in a lot of these conditions, we'll have some dysfunctional leptin, and again, leptins giving instructions to the immune system. So when there's a situation like an autoimmune condition, there's usually a leptin component in there when there is PCOS. That's an energy issue in my opinion. The body is not understanding the amount of energy, and I think people will have different manifestations of leptin dysfunction. I think there are some genetic predispositions that some women are gonna be more prone to PCOS. Some women will be more prone to endometriosis. There's different, you know, I think genetic components at play, but the solution is going to be pretty much similar.

That's where people get so myopically foc... I have this condition, I have this, and I'm like, yeah, we'll probably make dietary changes for somebody who has a thyroid condition versus someone who, you know, maybe is in perimenopause. Sometimes that overlaps. I might do a little bit of different nutritional tweaks. But a lot of the time we're gonna start with the environment because and then adding in those safety signals.

Because these hormones really need the best chance possible to do what they need to do. And if the environment and the nutrition is not what it needs to be, it's simply the body just doing, you know, taking instructions. And how that manifests from person to person, think will be, of like, their blueprint. What was, kind of, the information that was there already?

Katie: Oh, that's such a beautiful way of explaining it. And I've said this before, but anytime I get to repeat this, I love the chance, which is just, it was such a paradigm shift for me simply reframing the idea of symptoms as being a problem, as symptoms as being a messenger and getting curious about them. And I was able to learn so much from my body when I shifted into that curiosity instead of trying to just be in fix it mode and get rid of the symptoms themselves. And I feel like the things we're talking about, especially the light environment, I love that you call it that, actually has tremendous ability to shift so many things in our health.

And like I mentioned, it's often discounted because it's simple and because it's free and because it's not glamorous or it's not some cool new supplement we can take. But I would love for you to walk us through some of the factors that come into play when we're talking about light environment. And maybe sort of on a spectrum of like, if we were able to do it perfectly, what would a light environment look like? And maybe that would actually just be in nature. But, and in the modern world, like if we're not gonna just go camping for the rest of our lives, like what does that look like to integrate into our daily lifestyle in a way that's the most health supporting without being, you know, kind of like tipping the scale into neurotic and undoable?

Sarah: That's, I love that you say that because that's what I come up against really with clients and people in my community, is that they've been in this mindset of it has to be, you know, three minutes at this and two minutes of this and 10 minutes of that. And they are in these like pro, the protocol mindset, a perfection mindset. And the beautiful thing about this work is it doesn't have to be perfect. You know, a lot of people, they haven't seen a sunrise their entire life.

I don't honestly think I had seen more than five or six until I started doing this. And it was one of those things, like you said, it was so simple. I was like, that's too simple to actually be a thing. But at the point I was at, of like, really wanting to get pregnant, having multiple pregnancy losses, having IVF fail for me and just being out of money and resources, I'm like, so I have to just like go outside and look at the sky in the morning fine.

Like what do I have to lose here? And it is that simple of, when you wake up in the morning, I love it if people can get up during the sunrise window. Now, I actually created an app to help people to understand when that is for them, because it's gonna be different depending

on time of day or time of year, location. So many different things are gonna impact that. So the MyCircadian app, it's all one word.

And I think I gave a code for your listeners. But all you have to do is like, say, when is that window, if you have the, the premium version, you can even forecast for the next day to understand when that window is. I love it if people can just go outside during that window for a few minutes. You know, I've got two kids. One teen with profound autism who is very high needs and a toddler.

So you can imagine I can't do this stuff perfect. You know, I've got them in the house, I'm outside, I gotta take the dog out. So yeah, I got a couple of minutes, two to five minutes. I'm outside, I've grounded. That usually is gonna be really helpful for that sunrise window. And it doesn't have to be continuous. You just go outside for as long as you can. One minute, two minutes, five minutes. Awesome. It can be in and out. So you can have a door open and just be stepping in and out. And the next window that I find to be super impactful is UVA. That's when UV light comes on. So what a lot of people don't know, and the whole stuff about sunlight being demonized, is there's no UV light during the sunrise window.

There's no UV light really during the sunset window. There's a a period of time when the sun is, you know, below 10 degrees and then again in the afternoon when it's again below 10 degrees. And so we have a ton of red and infrared light available during that time. And that's preconditioning. The mitochondria, there's a little bit of blue, and so that blue is also talking to mitochondria and mitochondria from that signal of blue begin to make pregnenolone, which is your master sex steroid hormone. So we always. Think about hormones as this, your ovaries do all the work and we don't think of it in response to light that the pregnenolone gets made in the mitochondria. And this is for perimenopause, menopause.

And so your mitochondria are this kind of starting point and this really, you get this beautiful blue, just the right amount, to start that cortisol production. If we wake up and turn on a bunch of overhead lights, look at our phone, we're basically telling our brain it's the middle of the day in June, right? And so we want a nice rise of cortisol. We want leptin to be low in the morning. So we start to have an appetite.

Then UV light comes and that actually helps to put the brakes a little bit on cortisol, so it's not going wild. We get dopamine, serotonin, thyroid hormone. So many things, alpha-MSH, which is an appetite regulator. So I find if people are like, I've never been hungry in the morning, it's just not my thing. I get them doing the sunlight, sunrise, a little bit of UVA, and then all of a sudden the appetite starts coming back online from those really simple things.

And I would always say if you have to prioritize, morning time, a few minutes of sunrise. But UVA light is really where there's a lot of magic, especially that early uv, for brain, for metabolism, for hormones. Really, really helpful.

Katie: Oh, you touched on so many good things. And I think, like you said, It is really important to remember, I love that you said it doesn't have to be perfect. It doesn't have to be an exact amount of minutes. This is really about like baby steps and even little bits can make a huge difference. I've certainly seen that firsthand and encourage people. I feel like, still people doubt because it seems so simple, but really I feel like getting the natural light exposure is almost like hormone replacement for how much it does for your body. Like it start, it wakes up this whole cascade of hormones. I've heard Dr. Courtney Hunt talk about sunrise, sunlight, sunset, repeat, and how if we do that every day, it like really does train our body and our hormones.

And I love that. It's just like a simple mantra to remember. And just as anecdotal evidence of this, a lot of people listening might've heard me talk about years ago, I had Hashimoto's and had all kinds of autoimmune issues happening, and light was one of the pieces I addressed in my recovery from that. I no longer have Hashimoto's, but also I used to sunburn instantly. My vitamin D used to be in the twenties, no matter how much I took. Now I don't take vitamin D and it was 86 last time I tested it. My leptin, I think when I first tested it was like one point something. So like very, a lot lower than it was supposed to be. Now it's 7.1. But more importantly, I feel great now.

And so I just wanted to give anecdotal evidence of how big of an impact these things you are talking about can have, because it's been absolutely dramatic for me. And also like you said, I feel like this also often gets overlooked as well, is if we make an effort to go outside even for a few minutes during sunrise or sunset, that's natural red light therapy. Like we can buy red lights for thousands of dollars or we can literally get it for free by watching the sunrise and the sunset. And to me the magic and the habit stacking there, is especially if you can get that morning sunlight while hydrating and doing a little bit of mobility, I feel like that's my sweet spot of just like, oh, my brain feels good, my body feels good. Everything feels good.

Sarah: It's beautiful and I have red light panels. I used red light therapy in my fertility journey because I read the data and the research on women who had basically used red light therapy to get pregnant after failed IVF. I think the oldest woman in the study was in her fifties, and so I'm very bought into red light therapy. But one thing that the panels are missing is far infrared. So we've got red and near infrared, which helps make subcellular melatonin, helps activate cytochrome oxidase and make that beautiful metabolic water.

But one thing that those panels miss that we get naturally outdoors from daybreak until nightfall is far infrared and that actually expands our exclusion zone water.

I'm sure you've looked into the work of Dr. Gerald Pollock, but that's hugely important for our energy levels, for hydrating the fascia, for supporting mitochondrial energy. I mean, it's huge. And so I love a good red light therapy panel. I have several around, like collect them around my house at this point, but there's something that we miss when we're only relying on a panel, and that is of course, the UV, but there's also the far infrared. There's the natural syncing up with the Schumann resonance that happens when we're outside as well. That helps us to tap into different brainwave states that are very, very important for nervous system regulation. Because if the mitochondria think that we're in danger, you can even have the perfect diet and the perfect routine, but if your body thinks you're in danger, the work of Dr. Martin Picard says that your mitochondria can downregulate. I believe it's between 15 and 30% functionality. So bye-bye hormone function, you know? Bye-bye energy production. And so there's something I find with clients about really utilizing these free things that nature gives us in order to bring the body back into balance and functionality again.

Katie: Well, and if you're willing, you've touched on it a little bit, but I would love to hear more in depth about your own fertility journey with this. Because I know a lot of this comes from firsthand experience as well, and you mentioned you have an older child and a little one. But I would love to hear kind of what, how this played out in your own life. I think that would be really valuable for everyone listening as well.

Sarah: Yeah. Well, yeah I do have an older child, she'll be 18 in December and she has non-speaking autism. She was actually vaccine injured when she was about one and lost all of her speech, language, eye contact, everything. And so it was really difficult to, you know, navigate everything. And it wasn't talked about the way that it is now. There's more, I think, acceptance and understanding of kids like her now than there was back then.

Unfortunately, probably because there's so many more of them. But I've always, that was my red pill, I guess you could say, of kind of getting into alternative health and just seeing like, things are not what we're being told.

And so I've been through so many rabbit holes on the journey of trying to help her. And we had always said, we're gonna have another baby. We wanna have another baby. And it, but when she gets easier, when things get easier with her, and they just never did. So I got to be 40. And thought, okay, let's just let, let's do this. And it wasn't easy. You know I had been on a carnivore diet because I had started having my own autoimmune issues. I had thyroid issues, autoimmune issues, a lot of bloating, a lot of gut issues, skin issues, just probably from a lot of chronic stress.

And then following a heavily plant-based diet as a yoga teacher, thinking that was the right thing to do. Carnivore was awesome for the first year. Helped with a lot of those things. Never really helped me lose the weight, by the way. But helped a lot of the other stuff to chill out. Then lo and behold, I start trying to have a baby thinking I've been on this super healthy diet and I am miscarriage.

Miscarriage. And I'm starting to say, oh, wow, let me look at some of my labs. Thyroid was low. Hormones were just overall low. And I started going down the functional medicine rabbit hole of testing and supplements and more testing and more supplements and money and just like, lets take money and light it on fire. And I was largely said, yeah, we get, get your hormones back up, try to go on thyroid medication. My body completely flipped out on thyroid medication. I think because I really just needed to eat carbs and I didn't necessarily need to be on thyroid medication. So got to this point where I was introduced to quantum biology, circadian biology, and started looking at this stuff.

And like I said, I just started going outside. I just started integrating sunlight into my life. I just stopped the restrictive diet, started eating a more seasonal diet and kept diving into this work. I did Quantum Biology Collective. Their education, I've done levels one and two now and gone on for my boards with the Naturopathic medical board. Had the pleasure of speaking with Dr. Gerald Pollock. I just went on these like deep dive rabbit holes over this stuff. And It was October of, I guess, 2021. I had lost 30 pounds. I wasn't trying, I just was trying to get pregnant, but I had really been integrating, basically, these principles of light, of seasonal eating, of getting myself leptin insensitive.

I also played with deuterium depletion. I did a deuterium depleted water protocol. And got to this point where I was told, you need to start trying some cold therapy, which I did not want to do. But my friend, Dr. Corey Ghazvini is his name, he said, you've gotta start getting cold. You're an H2 haplotype, you're a northern haplotype, you gotta do it. So I was like, fine. Started cold plunging. And I think I probably would've gotten pregnant faster if I hadn't cold plunged the last two weeks of my cycle. Because I found out later that the egg needs not to be cold plunged when it's trying to implant. It can elevate the white blood cells. But literally January of 2022, I cold plunged all the way up until ovulation date and was also doing sunlight protocols. I was also grounding a ton. Seasonal eating. No more ketosis.

No more fasting. Just like the way, you know, just normal, quote unquote, in this quantum circadian lens, and got a positive pregnancy test. It, he, he's now two and a half and it's been life changing. Because for me, the big lesson was the more connected I am to nature... I got rid of all the supplements from the functional medicine.

And what I did a lot of the times, I'd drop my daughter off at school, I would go to my mountain, which is this place I go hiking this like 20 minutes from here, go hiking and lay on the rock and just be out in nature. And that was what worked. And I started doing that with clients at the same time, because I was working with a lot of clients and I was seeing things across the board shift for them. I was seeing antibodies go down tremendously. I was seeing people get off thyroid meds. I was seeing women have to lower their HRT dose.

I was seeing women having reduced or cessation of hot flashes. And so not only did I get to benefit from this and have my son, but I was seeing it across the board start working with clients all the way back in 2021.

Katie: That's incredible. Congratulations on your son. It's an amazing story. And you're like, you're walking the walk of how impactful this can be. And you mentioned the thyroid thing, which I know is a big concern for a lot of people listening and was my main focus for a lot of years when I had Hashimoto's. Like I said, light was a big piece for me in that as well as the nutritional side. Like you, I learned, after being kind of AIP, paleo, carnivore for a long time, is that that was too restrictive for my body. And the part that it seemed like was beneficial of that is that animal foods have a lot of nutrients and that was the piece that I was missing some of, that my body needed.

And I also needed carbs and minerals and other micronutrients that were not only present in meat. And seemingly getting all of those things in balance was the magic kind of sweet spot for me. It seems like this might be true for a lot of women, including one that I feel like it's not talked about enough is actually eating enough throughout the day to signal safety to our bodies. That was a really big key for my thyroid and one I've resisted for so long because I didn't wanna gain weight and I was trying to lose weight. And counterintuitively eating more was what actually helped me over time release the weight. But can you go a little deeper on the thyroid specific piece for the people listening who maybe that's their really big focus right now?

Sarah: Yeah, this thyroid is huge. I have so many people with thyroid issues and again, they get into the work like my Leptin Reset program and they come off meds or they... A lot of times I'll get a message in my group and they'll say, I'm doing your leptin reset and all of a sudden I've started having heart palpitations. I feel, like, anxious. I can't sleep. I'm like, you need to go get your labs drawn. You need to go see your doctor because you're, you probably need to take the meds down. And that's 9 nine times outta 10 what's going on is they need to take their meds down. And so just establishing these safety signals, this nourishment. If you think about it, leptin needs to give information to the body, including the thyroid. There's a lot of research and information on leptin and thyroid.

Once we start to regulate that, the body can relax a little bit, and I think that, I run into a lot of women who have been on keto, who have been on carnivore for a very long time. Their thyroid is not getting better, it's actually getting worse. And they're afraid of the weight gain. That's the biggest thing. And I was the same way. I was like, I've been, I haven't had carbs in like two years. What's gonna happen if I start eating breakfast? What's gonna happen if I add carbohydrates back into my diet? And the opposite happened of what I thought was gonna happen. And the opposite I find with a lot of women happens. You just have to be titrated about it. There's the repeat diet. I'm sure you've heard of that, and that I know a lot of people swing from like carnivore, keto, straight to that diet, and then they end up gaining massive amounts of weight.

That's the way, well, I won't say do whatever you wanna do, but I don't recommend doing that. I recommend a slower way to start giving the body these nutrients again. And that's to time the carbs with the sun. Eat more so in the middle of the day, eat things that are more seasonal. Add in things like root vegetables. That's gonna also give your body that grounding, that sense of safety. You probably need to bump up your minerals and work on your hydration. I have the whole, like, mineral protocol that I do in my program as well. But I find with my thyroid people there's often micronutrients, macronutrients that are missing that need to be added in.

And then the light signals. Because the thyroid is a light sensitive gland and blue light penetrates into thyroid. So if you're someone who's around a lot of blue light, that's a huge thing right there that can impact thyroid function. So, yeah that's, those are the basic things I see. And then antinutrients are a thing, I think, with thyroid. A lot of people, you know, they, if they're carnivore or keto, they maybe are already like bought into that. So I don't have to do as much convincing of like, let's chill out on the oxalates and let's chill out on like some of these other things or cook them way down. You know, let's eliminate grains for a bit. Let's pull these things off the table for a little bit.

It's the people that are more, you know, standard American that are like, do I really have to give up my oatmeal, my spinach, my nuts, nuts and you know, my flax seeds? I'm like, let's pull 'em out for a little bit. You know, I'm not saying you have to give it up forever, but let's pull that stuff out a little bit. And a lot of times I see that it does help with antibodies with thyroid. So those are the basics. And of course the seafood is one people are afraid of too, but they need the, they need the iodine, they need the selenium, they need those co-factors for thyroid support as well.

Katie: Yeah. I love that mindset of approaching it as kind of like an experiment, realizing it's not forever. I think that's one pitfall I fell into. It sounds like you might have as well, is like when something starts working, whether it's carnivore, AIP, like I must do it exactly like this

forever. Not understanding that that can be a really valuable tool short term. And the goal long term is to be adaptable and to be able to handle all the inputs in a healthy way.

But to your point, I think there's something so really helpful about like, if we can shift the mindset and look at like, how do I most flood my body with nutrients? That was something I thought of a lot during my healing phase is like how, without even increasing my calories that much, how do I just increase the nutrient level in every single thing I put in my mouth?

And it's like. The body needs all those different forms of fuel. And when I started doing that, I got to experiment with my own body and realize, like I could see a drastic difference almost day to day in my energy levels when I got those pieces dialed in. And it was that experimentation on myself and it was things like the light of course. But also like just increasing the nutrient quality of every food I ate, adding sardines to my diet every single day for a while. Which was that seafood piece that you just mentioned.

And you touched on a leptin reset. I know you have so many resources, I will link to them in the show notes. But can you just kind of give us an overview of what a leptin reset looks like and how this could be such a valuable tool if women are having any of these things that we've talked about and this is resonating with them.

Sarah: Yeah, so that's, it's kind of the blueprint I created back in 2021 for myself. And then I also started implementing it for clients. And it's really basic, you know. It's very basic stuff. A lot of the things that we're talking about, the light protocol, you know, the morning sunlight, the UVA. Getting, when there is vi... when there's UVB, which is where we make vitamin D, a safe titrated exposure to that stronger UV light. And doing it in a way that helps to increase vitamin D levels, support the immune system.

Protein is super, super important and part of a leptin reset. So I tell people I would like it when you wake up in the morning to just go straight outside. Don't look at phones or overhead lights. If you live with a family who turns on a bunch of lights, grab your, keep your blue blockers beside your nightstand. Pop those guys on.

Just go outside as soon as you wake up. Get the light in your eyes. Hydrate with a nice clean mineral water. I've also gotten into hydrogen lately, so I'm like, hydrogen is also a great little addition there for mitochondrial support. And then eat a protein and fat rich breakfast. You know, it doesn't have to be eggs. Everyone always thinks it's eggs. I haven't eaten eggs in like, I don't know, six, eight months. I just kind of go through phases where I want them more, I want them less.

So it can be leftover dinner, it can be breakfast sausage, it can be wild salmon but get protein and fat. Give your body those nourishment and safety signals In the morning. If

you're not hungry, if you're somebody who hasn't, like me, I didn't eat breakfast for years thinking I was gonna gain weight if I ate breakfast, do the sunlight and eat a little something.

You know, a couple hard boiled eggs or maybe again, a couple bites of leftover dinner. Just start the signal, but really be conscientious with the light exposure in the morning. And UVA light is really where a lot of that magic happens with the appetite regulation. So, those are basics. Getting breakfast in, hydration, sunlight, and then blocking the artificial light at night. That one is another one that if people have a hard time getting up in the morning, the first thing I'm gonna say, what are you doing at night? You know, are you up watching Netflix? Are you scrolling on your phone? Are you doom scrolling till 11 o'clock at night, 12 o'clock at night? Are you creating another cortisol rise and kicking off that sex steroid hormone pathway again after sunset?

Like we gotta look at that. Are you eating too late at night? Are you eating past sunset? A lot of times with a leptin reset. they're like, I just can't get out of bed in the morning, I just can't do it. I'm like, let's fix your evenings. Let's fix that. So those are the basic things that I'll do in a leptin reset without going fully into the program. Like I've got, it's like 45 different lessons of video lessons and PDF downloads and things like that about northern environments and, you know, hormone fluctuations and things like that. Cold therapy, deuterium, hydration, all of that is in there. But just as a basic. Those are things I think that everyone can find a benefit and feel better and have more energy just by doing those basic things. And they will directly impact that leptin signaling when you're doing those things consistently.

Katie: Yeah, and like I said, I know you have a tremendous amount of resources about this, including like courses where you walk people through very specifically as well as then you have free resources as well. I will link to all of those in the show notes. For any of you guys listening on the go, I highly recommend Sarah's work and she has so many good resources. And I feel like, even just that overview you gave us just now was kind of a masterclass, and if someone literally just implemented some of those things, I feel like they would see a difference within a couple of weeks. It's also amazing how quickly these things start to change when we give our body what it needs.

And to echo what you said, also, I feel like in the time restricted eating intermittent fasting phase, a lot of people started skipping breakfast, which seems like it can work okay for some guys. It seems like women's hormones in general really don't respond well to that. I know mine didn't. It worked for me for a little while until it didn't. But what I realized was with female hormones, what worked better for me personally was to, like you said, really load up on the nutrients at breakfast and then stop eating at sunset and really let that evening time, like have plenty of time to digest before I went to sleep.

Let that be about like meditating, red light therapy, laying with my feet up on the wall, Epsom salt bath, calming things. And really making friends with my nervous system at night. And then using the morning time to like really load up on the nutrients, load up on the light, the minerals, the hydration, the movement. Kind of all those things. Also, just randomly, a tip that I noticed, and I'm curious that there's data behind this. I used to just do protein smoothies for breakfast, and I can't pinpoint why, but it seems like there was a difference when I switched to just like ground beef or sardines plus it was like that plus fruit plus ferment was kind of my magic of like, I would have a little bit of sauerkraut, some fruit, maybe some leftover sweet potatoes, and then something with protein and fat.

And for me that was like the magic combination for energy. But I'm curious if there's any difference you've seen in like actually chewing our food versus just a smoothie. Not that I think smoothies are bad and if that's what it takes for us to get protein and fat and I think that's awesome. I just felt like I got more energy when I was chewing my breakfast.

Sarah: Yeah, you know, that's also what I say to people. I'm like, we've really gotta chew the breakfast. If you have to start off with a bone broth or if you have to start off with a protein shake, just to start somewhere and start getting into the routine of having food in the morning, I'm okay with it. But eventually I want you to chew because of how that signals leptin in the brain.

And I have a practitioner course also called the leptin master plan, where I've pulled together all the data and all the scientific studies around leptin. And when it comes to leptin signaling, the strongest signals for leptin signaling when we look at nutrition is going to be that bioavailable protein sources such as meat, eggs. You know, those are in the scientific literature when you look at leptin and nutrition, which is only one piece, right?

It's gotta be like a whole lifestyle. But that's basically what the research shows for leptin signaling is that bioavailable protein is going to be the strongest thing. And when it comes to the protein shakes, I actually quit having those myself because the artificial sweeteners, while, you know, they might be tasty, they can also impact leptin signaling as well. They can also skew your leptin signaling. And I find that a lot of people, they don't have the same satiety from the protein shakes and the smoothies. They don't have the same energy. I finally got my husband off of them. Because he always does things five years later than I do. And he's like, man, you were right. Like, I actually feel more satisfied and I have more energy from just chewing and eating like the meat for breakfast rather than having my smoothie.

So it's one of those things I think, that yeah, the research is there, the data is there. I have, in my practitioner course, I have information on the artificial sweeteners and why those are so negative for leptin. Like there's actual scientific data and research on it. Same thing with

the protein. But it's one of those things I'm like, just try and experiment for yourself, you know, just try it out. So yeah, there's data around that for sure.

Katie: I love it. Well, I feel like we've touched on so many important pieces. And like just to echo again, I feel like if, for everybody listening, if you just even try a couple of these things consistently, I am really sure that you'll notice a difference in your energy levels. It was drastic for me, and I hope we get to do a round two and a round three one day because I know there's so much more we can go into when it comes to understanding these hormones and light environment, and I would love to get even deeper on that. But for today's conversation, is there anything really relevant that we haven't gotten to go into yet, or that is especially important for women to understand when it comes to hormones and leptin and light?

Sarah: I mean, perimenopause is a huge topic right now. And I'm, just turned 46 last week. So I mean, I would be lying if I didn't say I wasn't in that stage of life as well. And I think that this work is even more important if you're in that stage of perimenopause. I find that I need it even more, and my body's even more sensitive to light. It's more sensitive to skipping meals, to not getting those nutrients that we really, really need. And so if you have women who are in that stage of life, I think that as perimenopause becomes this big topic, and everyone's really pushing a lot of HRT right now, which I'm not saying no one should do, but I'm saying that if you want the HRT to work properly or you wanna feel better that this work is really, really foundational in you getting through this period of life without a thousand different symptoms, you know?

Katie: I love it. Well, I will link to all the resources you have available in the show notes. You guys can find those always at wellnessmama.com. Sarah, I truly do hope we get to have more conversations in the future. These are some of my favorite topics, and I think you have such an important voice when it comes to understanding these. You've helped so many people. And I'm so grateful for everything you've shared and for your time and for being here today. Thank you so much.

Sarah: Thank you so much for having me. It's been a lot of fun.

Katie: And thank you as always for listening and sharing your most valuable resources, your time, your energy, and your attention with us today. We're both so grateful that you did, and I hope that you'll join me again on the next episode of The Wellness Mama Podcast.

