



Episode 196: How the Modern World is Changing Our Hormones (& How to Create a Balance Plan)

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Katie: Hello, and welcome to "The Wellness Mama Podcast." I'm Katie from wellnessmama.com, and this episode is going to be all about hormones and I can't wait to dive in. I'm here with Angelique Panagos, who I hope I'm pronouncing right. She's a registered nutritional therapist and the author of a book I read recently called "The Balance Plan." It had some amazing info that I can't wait to dive into. She specializes in hormone health, stress management, weight management, and digestive wellness. And her philosophy is basically that food is healing and nourishing, affects every cell in our body, impacting our bodies, our emotions, even our thoughts, and we're gonna go really deep on that today. So, Angelique, welcome and thanks for being here.

Angelique: Hi. Thank you so much. I'm absolutely thrilled to be here with you today.

Katie: Oh, and I'm thrilled to be talking to you. And one thing I loved in your book and I would love if you could kind of go through and explain to the listeners is all the ways that the modern world is really changing our hormones, because I think we've seen this pattern in the last few decades especially, where the data doesn't make sense anymore. It doesn't make sense that just food alone or just any one factor could cause what we're seeing statistically happening across the board. And I think you make a really compelling argument, so can you walk us through that?

Angelique: Absolutely. And it's something that I'm so passionate about at the moment because I feel that the modern world is almost out of control. It's just getting crazy and crazy and we just seem just to be trying to keep up with it the whole time. But what's happening is that with the modern world, we're getting a lot of

mixed signals from marketing as well. There's really clever marketing out there. And I feel that it's actually tricking us in a lot of different ways. And the biggest trick that it's done is that it's almost got most of us into this quick fix mentality. And this quick fix mentality means that we're searching for that one-pill wonder, that one food that one something that's gonna make everything feel better. So, I think that's what I just wanna start with that there is no one-pill wonder, no one-food wonder, no-one exercise wonder or self-care wonder that's gonna make everything okay. It's about changing a full lifestyle change.

And what modern world is doing is it's making us really stressed first of all. It's busy. I mean, I'm still searching for the person that has this complete list where they are living still within the modern world and not feeling stressed. That's the one aspect is the stress, and the stress is having a knock-on effect and simply put the message of stress overrides other messages in the body. And I think that's such an important thing to understand and to start working with is because if we look at stress affecting everything in the body, affecting other hormones, then we can start looking at how we can change our reaction.

So, the stress in itself affects our sleep. It affects our mental state. It affects our weight. That's super. But we look at, we've got the supertube or a tire around our waist. Our belly fat is just expanding all the time, and then also, it has a knock-on effect on our sex hormones as well progesterone and estrogen and testosterone. So, I mean, really highly stressed and it can manifest in symptoms like insomnia, irritability, and irregular periods. It can also increase the symptoms of polycystic ovaries, polycystic ovary syndrome, endometriosis, and even affect our fertility. So, that's the one part of the modern world that I feel has an extremely negative impact on our health.

The other part is the food-like products that come with the modern world. And when I talk about food-like products, it's all these mass-produced ultra-processed foods, and sometimes not even ultra-processed just processed foods and deep-fried foods, and what this does as we're going to eat these foods. Well, they look like food, they taste like food, they make us feel full like food, but they're void of a lot of nutrients, and our body runs on nutrients. It's the fuel for the body. It helps the body to make hormones, synthesize hormones, metabolize hormones, and gets you feeling optimal. So, if we're eating a diet that's void of these nutrients, we're actually starting with the rate-limiting step, and that's having a knock-on effect on us as well. That in itself is also, again, putting an extra stress on the body and increasing inflammation in the body which in turn is having a negative effect on our hormonal health.

I'll carry on from that. If we're looking at modern world again and the lack of sleep that comes with modern world, and that's because we're staying up late and we work in crazy hours. We're going to beds with our iPads, our laptops, our devices instead of our partners and we're staring at this blue light and that in itself is having a negative effect on hormonal health and on our cortisol balance again, so that stress hormone balance. If we start looking at all these different factors, throw in the lack of movement and lack of exercise as well, what it's creating is this perfect storm, this perfect hormonal storm.

Katie: Yeah. I think you're so right. And there are so many parts of that that I can't wait to unpack because obviously, none of us want to give up the modern world. Like you said, for better or for worse, it is what we have in our lifestyle and our lives depend on many aspects of this. I know, like, for me, I understand fully that the problems with being on the screen too much or seeing blue light at night, and I do things like use f.lux and

wear glasses to avoid that, but I can't not use my laptop because my mission in this world is to spread the health information for other moms and I need my laptop to do that, things like that.

So, I know that none of us want to get rid of all the conveniences of the modern world, and I think you do a really good job of kind of walking through how we can manage these factors of the modern world without giving them up, because like I said, nobody wants to go live in a yurt in the middle of the forest and not have access to these things. But I think you're right that we need to be very cognizant of them so that we can manage them in a smart way.

Angelique: Exactly, and it's about creating a lifestyle that fits in with this modern world, because we're in the world. And this is the thing, I'm exactly the same as you and I'm busy writing client programs at night because that's the time that my daughter is asleep. That's the time that I can work, but it's about putting little hacks in place that can really benefit you, your whole health as well as your hormonal health.

Katie: Yeah, exactly. So, okay. I wanna go through some of the things that you talk about in the book and the first being food, because that's my background as well. I have a background in nutrition and I do think that, you know, food is a huge and important component. I agree with you that it's not the only component. And like you said, it's not gonna fix everything if you don't have the other factors in place, too, and I think you're so right about stress, and I think that's gonna be the one thing that, like, we really as a generation have to conquer, and we're gonna go deep on that, too. But let's start with food. From your research in your clinical experience, what are you seeing that's so important about the food that we eat, and what are some factors we can optimize there?

Angelique: I think if we look at food as information, as well as eating for pleasure and taste, you know, we need to understand that that food that we're eating is the building blocks within the body as well. And I think that's something that I totally missed in my 20s. You know, I was living a total rock star life, partying at night, and eating loads of sugar, and refined carbohydrates during the day. And my own personal story is that I have polycystic ovaries and I have Hashimoto's as well. So, you know, I feel that your genes load the gun, but the environment pulls the trigger. I love that saying because I just feel that that is so true.

So, I mean, look at the food as information, then we start looking at it from a different angle. And our hormones need a steady stream of nutrients in order to be created, in order to function. And these steady stream of nutrients that we get is from the food that we eat. And I think the biggest failed social experiment that we were all signed up to whether we want it or not was this low fat, high sugar that came in. And I feel that that is one of the most or the driving contributions to this hormonal, I called it hormonal disease, you know, which is just this complete hormonal havoc that a lot of us are going through.

So, we need fat and we need protein to be able to synthesize certain hormones. If we look at just our sex hormones and our stress hormones, they are derived from fat. And we're looking at LDL cholesterol as well as other triglycerides, and that then gets broken down into pregnenolone, and then into progesterone and cortisol, DHEA, testosterone, and estrogen. If we're not getting enough fat in, we've already got a limiting step

right there. But then we also need nutrients from food and vegetables and complex carbohydrates. I like to think of those nutrients as Bitcoin.

So, Bitcoin is the latest craze at the moment, no one has ever seen Bitcoin, but we know it's really powerful and we can trade in it. And that's what these nutrients are. So, we eat the nutrients and they become these Bitcoins in the body and they're trading the whole time, and they're filling up your body's economy. So, if we're not getting in enough of these nutrients, again, that's another rate-limiting step. And the stress response in itself uses up a lot of nutrients. Again, so we really need to keep on topping up with the body's economy. And it can be really easy to do as well, but the thing is we have to be eating real food to achieve this.

Then in my research, I called them my detox warriors. I've come to love certain foods for their beautiful property of detoxification. I know the body has amazing detox systems in place, but again, if you're not giving at the right nutrients to do its job optimally, then it's not gonna do its job optimally and that's what we want. We want our body to be functioned to the best that it can.

So, if we're talking about these detox foods or detox warriors, we're looking at Christopher's vegetables, dark green leafy vegetables, broccoli, broccoli sprouts, and they have actually shown to help with the metabolism of estrogen as well as the detoxification and elimination of estrogen. And then I also refer to my eco warriors, these are the guys that help our gut floor, the microbiome to fertilize them, to help them grow because we really need a very healthy gut as well for hormonal function. So, it's not just about any one food in particular. It's about getting all these foods in on a daily basis as much as you can 80% of the time so that you can be topping up your body's economy.

Katie: Yeah, exactly. That makes so much sense. And I'm gonna touch on this particularly controversial food with you because I love your explanation and I wanna hear your take on it. I feel like it's something we need to reiterate. So, let's tackle the sugar giant. I know this is one I get some pushback on, I'm guessing you do too, but explain what sugar is doing in that whole economy that you just talked about, and I love that Bitcoin analogy, but let's go deep on sugar.

Angelique: Okay. So, sugar, I mean, if we're not talking about sugar, we're thinking about sugar. I'm definitely writing about sugar and I already feel that it was a total scientific or social experiment that we were all signed up to. And suddenly, we were taking out the fats because fats were bad and we were just filling foods with sugar, and I actually have definition of sugar needs to be expanded. It's not just the white crystallized stuff or the brown crystallized stuff that we may or may not put into your coffee. It's also the refined carbohydrates, the white, sweet, and fluffy foods that convert into sugar or glucose in the body, which happen the same effect.

So, sugar in itself, if you eat sugar occasionally, if you have a chocolate occasionally, putting it in the 20% of food, not in your 80% of food, that's not gonna have such a major effect on your health. But if you're having a high sugary diet or high refined sugar diet, what that's doing is it's causing your blood sugar levels to rise. And I think blood sugar balance, it's a word that gets said a lot. We've spoken about it for many years now, but it is

the cornerstone. It's the foundation of healthy hormones. And the reason for that is if we have this elevated blood sugar spikes the whole time, and that we get from refined sugars, from high sugary foods. And even from the more natural sugars, because that's another thing that I'd actually like to touch on is that just replacing the refined sugars with a whole lot of maple syrup or a whole lot of honey is not actually changing. It's not actually changing the behavior. It's just swapping one sweetener for another.

But going back to what sugar does, we have these high blood sugar level spikes. In turn, the body then secretes insulin from the pancreas. Insulin's role is to take the blood sugar out of the blood and stick it into the cells. This is a very important part of keeping us alive. It's a natural thing to do and we are extremely grateful that it does this. However, these insulin spikes, if we keep having a lot of high sugary foods, in turn we'll have high insulin spikes, it's referred to as hyperinsulinemia. When that starts happening, we have a knock-on effect on our hormonal health.

From that, we get more testosterone to be secreted from the ovaries. We get more of something called aromatase activity which is more testosterone being converted into estrogen. We also get less of something called sex hormone-binding globulin, I call them my sheepdogs. That's the molecule that keeps free testosterone and free estrogen in check so that it keeps everything in balance.

So, it also has a knock-on effect again on cortisol. So, what that looks like symptom-wise is that we might have more acne, be a bit more irritable, a bit more angry, maybe have male pattern balding on the top of our heads, but getting hair on our chin and the mustache area or even nipples, stomach, back. It can lead to weight gain. It can lead to irregular periods. It can lead to water retention. It can lead to sore breasts. All of these things can be a knock-on effect from the amount of sugar that we're eating because what it does is it disregulates, it disrupts what's going on in the body.

Katie: Yeah, exactly. I think that's one of those things that is relatively simple actually to test if you know what you're doing, and can give us so much insight into our health. Like, for me, some metrics that I always make sure I track at least every once in a while are my fasting blood glucose in the morning, and also I track my cycle every month because now there's apps and such easy ways to do that. And I feel like those are some easy really kind of simple not expensive things we can do to give us this whole picture into our health.

So, for me, I know from ever since I really, like, overhauled my lifestyle and my diet, my fasting blood glucose is between 75 and 77 every morning. And if it's not in that range, I either, you know, ate or drink too much alcohol the night before or I've got some kind of inflammation going on in the body, and that's a really good first clue. But I think something else you said is really important because you talked about how we can't just substitute sugar for natural sugars are the exact same thing when you think about the body's economy.

But I also love that in your book, you're not advocating for women an extremely low carb approach, and I think that's an important thing I'd love to hear you speak to because we do, like, you've talked about the building blocks for this economy in our hormones. And our hormones do need carbs, but they need to come from the right sources and you speak to this in the book, but I'd love if you could go through a little bit of a more thorough explanation of that just to kind of put that in perspective for women, because I know that keto

is big right now, and I think it can have its time and its place, but I don't think long-term keto with no carbs exposure at all is necessarily helpful especially for women with hormone problems, but I'd love to hear your take.

Angelique: Yeah, absolutely. And just to go back on what you were saying with the testing as well. Another test that you can do is the HbA1c, which is your hemoglobin A1C, and that actually shows you what insulin has been doing over the last three months in the body. So, that's a great one to test as well. And the other issue with this hyperinsulinemia is it can lead to insulin resistance and then type 2 diabetes. But that's where carbs come in as well because, I mean, officially in the U.K. and I'm sure it's the same in the U.S. and in South Africa, everywhere actually we're now are saying that carb is terrible, don't eat carbs. but there's two types of carbs. We get the right carbs, because I call it right carbs, good fat as opposed to no carbs, high fat.

And if we're looking at carbohydrate, there's different types of carbohydrates even broccoli is a carbohydrate. So, we wanna be getting the right types of carbohydrates in. But when we're talking about what we normally associate with carbohydrates like bread, pasta, rice, and all of those, then we wanna be looking at avoiding the white, sweet, and fluffy foods, so the white rice, white bread, white pasta, white flour, and bringing in your complex carbohydrate which is your brown and fibrous food. So, that would be your brown rice, quinoa, looking at bring in some sweet potato, butternut squash as well, because what they do in the body, they are slower release carbs. Also whole oats, so that's the unprocessed oats.

They are slower release, but they also are high in B vitamins. And for example, oats has been shown to be really beneficial in lowering your LDL cholesterol and blood pressure. So, if we're looking at bringing in a diet that's sustainable for life, a diet that you can follow long-term instead of a fad diet, because fad diets do not work. If they did work, then we would never need to use them again, and I was an absolute serial dieter. I've tried every single diet under the sun and I can put my hand in my heart and say that they don't work.

But in the same breadth, we are all biochemically individuals, so there's not a one-size-fits-all approach, so you need to work out what works for your body. And the way you work out what works is you experiment with different amongst our food. So, different proportions of carbohydrate to protein that works for you. I mean, of the same school of thought where keto is concerned, keto works for some, keto doesn't work for others. And the jury for me is still out as to whether you should be on this keto plan for an extended period of time or whether it's something that you do short-term. And again, I would be working with a practitioner if I was doing...I would recommend working with the practitioner for keto.

But when we look at carbohydrates as well, you know, we're looking at them as part of your meal as opposed to the main bulk of your meal. And that's the way I view it and that's what I talk about in the book as well. I've got a pasta dish as one of my recipes and it has less pasta than what someone would normally put in, but it's still a pasta dish.

So, looking at your plate and having only a quarter of the plate with your complex carbohydrates instead of your whole plate with a tiny bit of protein and a little bit of veg, then you're already making better use of the carbohydrate and better use of the information that you're gonna be giving your body.

Katie: Yeah, exactly. And I think now in the modern world, too, we can take advantage of these advances like these spiralizers and all these fun ways we can incorporate vegetables in place of and still get all the same taste of, like, pasta for instance. Zucchini noodles are awesome, or sweet potato noodles can be great. So, I love that with the challenges of the modern world, it also comes in super fun advances that can make it delicious and easy way to get more veggies, and I know my kids love that one.

I mentioned briefly about tracking our cycles, and I would love if you could give your perspective on, like, basically what we can learn from our cycle and the best ways to kind of monitor that and track it, because I know for me, I had been tracking mine I guess for at least 13 years now since I got married and it's such good valuable information. For one, if you're in that childbearing time of life, you wanna know when you conceived, and you wanna know when you're gonna be due. But even outside of that, women go through all these incredible hormonal changes every month, which probably many of us are familiar with from, you know, PMS or when our cycle start, but there's so much more to it than that. And I've noticed from these 13 years of tracking that, like, even small changes of my cycle are usually a window into something that I have changed in my diet or my lifestyle or something I need to change. So, can you kind of walk us through what's going on in an average month with our hormone cycles and what we can learn from that?

Angelique: Absolutely. And I think I call it it's like a report card every month that we get and that's, so your cycle can give you these massive clues. And these clues can actually just be little niggly symptoms, and it's something that we really need to be listening to. So, hormones can fill us with dread and sometimes the word hormones is synonymous with rampant moods and insatiable hunger, and, you know, you can get that with your cycle as well.

But I also think that we really get fixated on what a perfect cycle should look like, and I think that comes from the pill, in that pill mentality that we should have this 28-day cycle. And if you don't have a 28-day cycle, you either late or you're early. And I feel that that's definitely something that I was really sucked into and we have to work out what your body does so what works for your body. But initially as we're starting with our cycles, our cycle starts from the first day of bleed, that's your day one, and we go into the hormonal dance as it were, and that's your follicular phase. And your follicular phase are divided into two sections, that's your pre-ovulatory phase and then your ovulation.

And you'll notice different changes and symptoms within that phase, and I could say the first thing to look at and one of the clues is the color of the bleed as well. We're really looking for a nice bright red color. And we also, looking at not too many different uncomfortable symptoms. So, you might feel the feeling of relief as your period starts. And then, possibly a little bit of irritation as the cramps start, but those cramps shouldn't be debilitating and you shouldn't have to be in bed for days because of the period pain and just someone that has polycystic ovaries and also adenomyosis.

You know, I had debilitating period pains and I did not think to question that. And I wish I had questioned it in my 20s because I feel that maybe things would've gone a lot smoothly in my fertility journey if I'd understand more about my body in my 30s. So, that's your first phase. So, what's happening in that phase is that your

body is getting ready for the main event. And though, we might feel that our bleed is the main event, it's actually ovulation.

Your body during childbearing years is getting ready for this incredible event every single month whether or not you choose to reproduce, it's still aiming for that event. It's the continuation of the species. It's to get you to ovulate and all and for you to conceive. So, the body is basically getting ready for this, and with that, our different hormones are being stimulated. So, our follicle-stimulating hormone and our luteinizing hormones are ones that flies in the beginning phases, and then that stimulates for the egg to start being matured in the follicles. And I think it's just such an amazing process that's happening within the body, even though we are totally not aware of it, but excepting for those different feelings that we may feel, because as soon as estrogen starts to climb, that's still within the first part of your cycle, then you might start feeling that you get a bit more energy, so your energy starts to increase around that time.

Then during ovulation, this is where we have, I call it a cameo appearance, it's from testosterone and at first show quick appearance and it gets you feeling great, maybe gets you to initiate sex. So, it gives you that bit of a va-va-voom and that's the continuation of the species. It gets you ready because it gets you more interested in having intercourse, getting ready to feel pregnant. And I feel that that's probably where I find most women are on it. They show during that time, they have more confidence. They know what they want. This is the time that we might be going into meetings with more confidence or be asking for that pay rise or just be booking that holidays. It gives you the sense of...it's that testosterone that really helps with confidence.

And then after that, we're going to the luteal phase. A luteal phase should be around 14 days. If you have a really short luteal phase or really long luteal phase, that's an indication that we need to be doing some investigation around that as well. And there's great ways of tracking that. I mean, I get all my clients to track their periods whether they're for fertility or hormones or not. I just feel like we should all know what's going on with our cycle. But in that luteal phase, this is where progesterone starts increasing as well. And if there isn't a pregnancy, this is where also everything will stop breaking down and we'll get our period again. But during this phase, we might get slightly elevated temperature. And in this phase is also we might start getting our PMS symptoms and that can be bloatings of breast, insomnia and craving.

However, all of these symptoms should not be crazy out-of-control symptoms. And I feel that's where we can really start looking at our periods as a report card, and we can start seeing what's going on. And each month is going to be different, and not every period is the same that we can really start tracking using these apps, tracking what's going on, how you're feeling, the length of your cycle as well to be able to see if you need to be doing some investigation as to what's going on.

Katie: I'm so glad you brought up testosterone because I think you're right. Most women don't really consider that necessarily as part of their hormone equation. We typically hear more about progesterone and estrogen, and obviously, those are super important for women. But that's one thing I've been researching a lot lately because I've gotten quite a few questions from women whose husbands are struggling with low testosterone, and through their research, are finding out that, like, actually, women are supposed to have the right balance of testosterone as well, and we're seeing this decline in men of testosterone, and it turns out we're seeing it in women, too. And because testosterone is part of that estrogen equation, that's a big deal for women.

And like you said, it goes back to libido, but it also goes back to muscle and, like, all these normal processes in the body. So, I'm so, so glad that you brought that up, and I'm curious kind of a two-prong thing is what do you think are some of the factors that are the reason we're seeing a decline in testosterone in men and women, and are there things we can do to kind of support that process in the body. I know one of my defaults and I wanna go deep on it in a minute is we should all be avoiding plastic because it has a very harmful effect on testosterone and other hormones, but I'm curious what you found.

Angelique: I totally agree. And I love that a cameo appearance from testosterone, which I forgot to mention was right at the end of the cycle as well. So, I feel like it's one in the middle to initiate the reproduction and the continuation of the species. And then, again, at the end, to say sorry I've been such a moody cow. So, again, it gets you in the mood. It's your va-va-voom. It's your confidence and I feel that it can be lacking, and I've also seen a decline and, again, we need to be looking at the building blocks. So, are we getting enough nutrients in to make testosterone first of all, and that comes from fats again. Are we so highly stressed that our body is using, and that's really a simple way of putting it, but it is using, favoring, making cortisol above making your other sex hormones? So, that's another thing to look at.

And then, are we having so much sugar that a lot of testosterone is being converted into estrogen? Another thing to consider, and then these xenoestrogens, plastics of the world, and are they having a knock-on effect? This is what I've been seeing in the research and reading a lot up about because, again, I think we, as you've said, as females, we don't think about testosterone, but sorry guys, you don't monopolize that hormone. And we really need it. It's so important. It's important for bone health. It's important for skin elasticity. It's important for lubrication. It's important for a lot of things.

So, I would look at those, for me, a starting point is always looking at are you getting the right building blocks in, and are you stressing far too much? Can we do something to change those things as a starting point? And I think that's always my starting point with hormones, because although hormones are extremely complicated, and I've really simplified them here to actually extremely complicated and interwoven webs, but if we start bringing in the building blocks that we need, and we start bringing in the lifestyle changes that we need, and a lot of things can be rectified underneath. So, I hope that answers that for you.

Katie: It does. And I think that something you've said is something we should all have top of mind is understanding that the body prioritizes things that are needed for survival. And in the body's mind, we do actually need stress hormones and adrenaline and cortisol in the right amount because that keeps us alive. That's what activates our fight or flight when we need to actually run from something that's dangerous. And so, the body will prioritize those hormones over things like reproduction, which are not vital if you are starving or being chased by something or in a life or death situation, or even digestion which isn't necessary if you need to run from something, you can turn that off for a few minutes.

And so, I think the key is, and you can probably speak to this better than I can, but even if we don't "feel stressed," stress doesn't have to be just like mentally, like, "Oh, I'm feeling very stressed out," from the body's perspective if the body is feeling stressed even if we think we're fine, because I, for instance, I'm a recovering perfectionist, I'm very type A, I feel great when I'm under stress. I thrive. I get stuff done. I'm on top of my

game. But my body is suffering from that and it took me a lot of years to realize that the body sees stress as lack of sleep, too much exposure to blue light, like you mentioned, and too many plastic chemicals that are in our lives. All of these factors, the body interprets as stress even if we don't feel stressed.

So, I feel like this is perfect. We've come full circle back to the stress and cortisol equation and how busy we all are. So, can you just go a little bit deeper on that in explaining some of the ways that we can kind of take that stress away from the body even if we don't feel stressed?

Angelique: Absolutely. I see this a lot in clinic as well and I love the fact like you said you are a recovering perfectionist because I feel like I am as well. I see this a lot in clinic where people say, "But I don't feel stressed." And then I might just dive a bit deeper, and then for example, for instance if someone is trying hard to lose weight and they can't lose weight, and then fat is on their mind continuously. Or if they are exercising excessively so really killing it in the gym all the time, that has a negative effect on the body. It actually has a knock-on effect, where it becomes as a stressor for the body. Or if they're eating a diet that's pro-inflammatory and there's extra inflammation in the body, and that inflammation is really important. We need inflammation. If we didn't have inflammation, a lot of healing would not happen. However, inflammation should be like a candle, and what we have in the modern world is like a raging bonfire. And so, inflammation causes stress on the body. High sugary food causes stress on the body. Not eating for really long periods of time causes stress on the body.

So, all of these different things have an effect on the body. So, even if you don't feel stressed or if you internalize stress, that in itself has an effect on the body. So, how the body works is it doesn't differentiate between a wild animal attacking you or you taking a wild animal as a pet. And I use that analogy as we've taken this wild animal. We've created the space for it in our lives. It's a lion that's sitting next to us continuously and jumping every two seconds because it's a wild animal that's going to eat us. And that wild animal can be working late into the night. It can be not meeting deadlines or having too many deadlines or taking on too many things at once. So, I think I refer to it as professional plate spinners. We become this professional plate spinners and we really need to learn how to put some plates down, or to give some plates to someone else to spin as well.

So, all of these things are having a knock-on effect on the body, and very simply put, again, you know, just to reiterate that that stress overrides other messages in the body, and that's exactly what it's supposed to be doing, exactly as you've said, you don't need to be digesting lunch. It shouldn't be about to become a wild animal's lunch. You don't need to be reproducing if actually you're living as though you in this fight or flight your life is under a threat all the time.

So, I feel that we can't...I wish I have the magic wand to take away the excess stress. You know, some stress in our life is really good. It's called eustress. It's what gets us off the couch. It's what gets us out of bed in the morning, but this chronic stress state that we live in and how stress is supposed to work in the body because it's a very positive message in the body, and that it keeps us alive. It's supposed to be an acute reaction. So, you step out in front of a car. It hoots at you. You jump back. That's like an acute stressor. Your amount of stress response, you deal with it. It's done, it's over. But what's happening within the body during that stress

response is it actually starts breaking down glucose stores to give us this energy to be able to run, our heart beats faster, our lungs breathe deeper.

That is our natural reaction. But if we're living in this chronic stress state, we're putting our body through this all the time. So, changing your reaction to stress is one of the big things that I talk about as well, because we can preempt that stress. We can preempt getting an email from our boss. We can preempt not getting a meeting a deadline. We can preempt our child not being able to get to the event or misbehaving at an event, you know, all these types of things that you might create in your own head, you can preempt to fight with someone. You can read an email with the mood that you have at the moment instead of how it was meant to be received, all these different things that we preempt stress.

And so, I guess it's changing that behavior as well and just understanding, and if we go self, you know, getting yourself to understand that, you know, you can't change the future. So, you need to just deal with what's going on in the present. Let me just recap that. So, it's changing our reaction to stress, changing our perception of stress and then doing things that can reduce stress, and those things are yoga, going for long walks, doing breathing techniques. So, barely breathing deep into the belly, I call it...technique called four-seven breathing, where you breathe in for the count of four and out for the count of seven. Well, that's stimulating the parasympathetic nervous system.

And so the parasympathetic nervous system is the opposite to your stress response nervous system which is called your sympathetic nervous system. And your parasympathetic nervous system is where it digests and repair happens is where hormones function much better. So, just by doing simple things like that, you can actually switch yourself into a more calm state, but just talking about it doesn't do it. You actually have to start putting these things into practice. And sometimes we feel that we don't have the time to de-stress, and I think it was a saying, was it the Dalai Lama that said, "Meditate for 20 minutes, if you don't have time, do it for an hour." So, we need to actually make space in our lives to de-stress. And that's with self-care needs to be seen as a necessity and not a luxury.

Katie: That is a good point. It's just like you're not gonna get in shape just by having a kettlebell in your house, you actually have to use it. And that's such a good point. And I think you're right, that's something we have to be very conscious and cognizant of that maybe our grandparents didn't have to face as much as we do because they got enough sleep at night, and they weren't exposed to plastic all day long, and they didn't have blue light looking at them from all angles at all hours of the night. And so, we do have to be a little bit more proactive about these things, but the tradeoff is hopefully we get to live longer and be healthier and be happier and feel better.

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Katie: And I know I get a lot of questions about a couple specific issues, so I want to make sure we have time to touch on those because they seem to be on the rise and I know you addressed them on your book. I'll kind of lump together being PCOS and endometriosis. I get a lot of emails from readers who are going through one of those, and sometimes the fertility issues that come with them. And I know that you have both personal and clinical experience, so I'd love if you could touch on that.

Angelique: And I feel that it's on the rise as well, or clinically, well, the research is showing that it is on the rise, and both PCOS and endometriosis are conditions that can be extremely debilitating and can have a negative impact on fertility, and it can be harder to fall pregnant or keep a pregnancy, but that does not mean that you won't be able to get pregnant or carry full-time. And the reason why I say that is because being diagnosed with those conditions and then jumping on Dr. Google, and, you know, it's like Dr. Google will see you now and fill your head with all the dread of the world. Actually, for many years, it's just like it's gonna be so hard for me to fall pregnant.

It's so hard for me to keep the pregnancy, and I feel that, you know, we need to be actually giving our body and our minds the right signals, but with polycystic ovaries, for example, you know, the jury is still out as to what the exact cause of it is but, you know, the general consensus is that it is an insulin and testosterone-driven condition. And if it's an insulin and testosterone-driven condition, then that means that lifestyle will have a major impact on how you can look at correcting the symptoms. And what I see in clinic and on my own experience is that even if you have polycystic ovaries, you can get your bloods back into line where it shows that you are not presenting with polycystic ovaries with your blood results.

So, what I mean by that is that you can make a lot of changes to be able to get the body balanced again. And the main changes that I'd say with polycystic ovary is to reduce the sugar consumption, reduce your refined carbohydrates, avoid them, reduce your caffeine, change your reaction to stress, make sure you're getting enough fats, carbohydrates, and vegetables in the diet, and getting enough sleep.

So, that again, is the cornerstone of health and the cornerstone of hormonal balance. But then there's also different supplements that we can use again and I would say another thing here is just to say it again, we're all bi-chemically individuals. So, even though you may fit into the polycystic ovary box, your body is still gonna react differently to certain things. You need to work out what works for you, but following a low GI diet, other research is definitely in favor for that at the moment. So, again, looking at your foods that are, what I've said before, lower in sugars and refined carbohydrates.

And with polycystic ovaries, vitamin D has been shown to be deficient in many, I think it's up to 85% of those of us. And I may be wrong on that statistic but it's a very high percentage of us with polycystic ovaries have low vitamin D status. So, something that you could get checked quite easily and get that topped up again. So, that's what polycystic ovaries.

And another...your signs and symptoms of that could be acne, irregular period, insulin resistance, what I call the supertube or the belly fat that you feel like you have to tuck your stomach in with your top into your trousers, thinning hair, irregular periods, or amenorrhea is actually not having a period at all. If you have any of those symptoms, definitely going to get checked out for polycystic ovaries.

Katie: I think that was a great synopsis. So, I think that's on the rise unfortunately but I think you're right that it doesn't have to be a lifetime sentence necessarily, and like you said, your genes may have an impact on your health and we know that, but also we now know just how powerful epigenetics are and how vastly important your diet and lifestyle are. I think that's really empowering. Like you said, it's easy to go on Google or even to get genes tested and to feel like everything is so bleak. But there are so much we can do. I think that's the part we have to focus on that we really truly because of all these things have a lot more power than we used to because we understand them.

Angelique: Absolutely, absolutely. And I think, you know, with...the really exciting thing about science is that we're always learning, you know, I don't know, are we talking about it more, are we smashing through the taboos and actually talking about, "Hey, I have polycystic ovaries," or had irregular periods, or have excessive cramping with my period. And so that, learning more about these conditions plus they're on the rise, I think it's both of those things more of us are talking about it, and they're on the rise. And I feel that modern life is having a major impact on that. And if we look at endometriosis for example, endometriosis can affect up to something like 15% of all menstruating women, and it can have a knock-on effect on your fertility, but it can be extremely debilitating during your period where, you know, it can even be pain within your back passage. I've seen it with ladies that, you know, they just buckled over with pain. I've been there myself.

But we're learning about endometriosis now is that it's also an autoimmune condition. So, when we hear anything that's an autoimmune condition, then we start looking at the immune system as well as the hormones and say Hashimoto's, for example. It then becomes an immune system issue as well. And I feel that with endometriosis, we really need to be looking at inflammation, and reducing inflammation. And I'm not talking about an alkaline diet because, you know, the jury is still out on those. I'm talking about giving the body the nutrients that it needs, the building blocks that it needs to naturally bring in your anti-inflammatory agents within the body. And that we're looking at your omega-3 fatty acids, for example, bringing in enough fiber so that we're pooping.

So, endometriosis is an estrogen-led condition. And so, what we wanna be doing is we want to make sure that we're getting that spent estrogen out of the body, and the way that it goes is through stool and that's how we get rid of waste products. So, we need to make sure that we're pooping enough.

Katie: Another great point for sure. And I also have a segment of readership that is on the opposite end of the spectrum and more in the perimenopause and starting to near menopause phase, and I feel like this is an area I have no personal experience with obviously because I'm still in that childbearing time of my life. And I know you've worked with people who are going through this. So, I would love, if you could kind of just explain on a broad level what's happening hormonally, why people are feeling different, and then also, what are some specific ways for that period of life that can help really support. Because I know...I hear all kinds of complaints from women about sleep problems and hormone problems and irritability, and all those things you mentioned with PCOS seemed and maybe also go along with it, the hair loss or the weight again. So, kind of walk us through what's going on there and what we need to know.

Angelique: I feel that perimenopause and menopause is, it's a time that's really dreaded, and it's not a disease or a medical condition. It's a natural process of life and we're all going to transition to that, and I feel that let's do what we can in our childbearing years, and as we're starting to go through it, it's never too late to make these change, to make it more bearable and for some of those to just...for some of us who are likely just to skip through it, but the symptoms that can come with it are hot flashes, lack of energy, night sweats, weight gain, vaginal dryness, mood swings, joint pain, memory loss, hair loss. You know, it can be an absolute time where you're just feeling some form of low-grade terrible. But there are so many things that we can do. So, if we look at what exactly is going on, our hormones are influx, and perimenopause can last anything from 10 to 15 years. Fifteen years of feeling all those symptoms would drive anyone insane.

So, I think we need to acknowledge that we can do a whole lot of things to make this process better. So, what exactly is causing the symptoms is we're having up and down of hormones, and the hormones we're looking at here in particular is estrogen and progesterone. And estrogen and progesterone work within this like a seesaw with each other, and what's happening in perimenopause is that as we're going through this whole period, because the menopause is actually when you haven't had a period for a year then you menopause or you've got through the menopause. But in that beginning stage is when your periods are much lighter or they're much further apart and you're starting to get all these other symptoms as well, then we're actually looking at the hormones in, like, we call it being influx. So you might have one-month elevated estrogen, and the other month, a really low progesterone or vice versa, and that's what's giving rise to these symptoms.

There's a lot of research around the estrogen fluctuation leading to the hot flashes and the night sweats. And those night sweats are then further leading to insomnia and further stress on the body. So, what I feel that we need to do is we need to, first of all, acknowledge that this is happening within the body, and then looking at ways that we can rectify it.

Now, if we go straight onto HRT, that works for some. Absolutely, it does, but it does not work for everyone. And if we're just going onto HRT, then we're looking at it from a replacement model as opposed to looking at it from a functional model, and really, everything that I do is looking at it from the underlying causes of what's

going on. The things that I found that have really helped and what I found within the research is that reducing stress can have a very positive effect on hot flushes for example, bringing in foods like flax seeds, and again, my detox warriors. Maybe bringing in some sprouted broccoli. That can have a very positive effect again on hot flushes, night sweats, and constipation, another thing that comes with it. Then if we're looking at lack of energy, ensuring that you are eating the right types of carbohydrate. So, that's again, looking at the right carbs, not no carbs and getting some form of movement in is also extremely important during this time.

Again, our progesterone is one of our hormones. I call it the zen master. It's the one that gets this feeling calm, and if we're looking at this time during perimenopause, progesterone is declining, and what we can do here again is just support providing with B vitamins and zinc, so B and zinc-rich foods can be extremely helpful here again. And the reason why I keep talking about stress is because stress actually uses up zinc and B vitamins.

Another thing that you can look to do is to bring in some magnesium-rich foods. It's referred to as mother nature's relaxant, and that can really help if you're feeling stressed and irritable, and moody as well. Mood swings can also come with perimenopause. If you feel like one minute's weaknesses, the next minute you're just like a fire-breathing dragon, then you know that can also be happening due to decline in estrogen and again, it can also have a knock-on effect on serotonin, so the happy hormones. So, you might be feeling a bit more cheerful at that time.

So here is where I'd say gut health is essential again. So, looking at getting in the foods that are going to feed the good bacteria within the gut and reducing things like alcohol, sugar, and coffee and caffeine, because there's a lot of research that actually shows that they have an extremely negative effect on PMS symptoms as well as menopausal symptoms.

Katie: Got it. And I can't believe, this hour has so much flown by. It's been such a joy to talk to you. A few questions I love to ask toward the end of interviews, and I can't wait to hear your take are, are there any things that you feel the people don't really know or understand about your particular area of expertise? I know we've delve into a lot of those, but I'm curious if there's a few that really stand out to you.

Angelique: I feel that it's this whole replacement model mentality that we have, and I mean, it's a quick fix wonder, that quick one-pill wonder that we're looking at. I feel that we really need to look at it from a functional model, like, what's going on in the whole body that we can do? Because our hormones work in synergy in each other, and what happens in one hormone doesn't just stay in there. If there's too much of it or too little of it, it has a knock-on effect on other hormones. So, I feel that that's one area.

If you're estrogen dominant, for example. If you have genetically low progesterone or if you've got polycystic ovaries, and therefore, your progesterone is lower, or if you've got endometriosis or anything like that, then we might just end up focusing on one hormone, but that's not how the body works. We need to be looking at the whole system. And then, I feel that, again, stress, we're talking about it now but stress has his major, and we have discussed quite a lot today, but has this major impact on our hormones as a whole.

And then the third thing is this building blocks, you know, why is food so important and looking at food as information, and I feel that there needs to be a lot of additional research around that still, and I feel that's where possibly the research was lacking a bit is that we were looking at more at the pharmaceutical stuff as to how we can balance hormones, and the work that I'm doing now is really diving deep into what we can do lifestyle and food-wise to balance the hormones. But in that point, I must just say that allopathic medicine and looking at, if you do need treatment and, you know, it's to speak with your doctors not to avoid these things are it's to do the underlying work as the same time which will in turn help your treatment go further.

Katie: I absolutely agree. I say that often that I have only respect for doctors. I think it does take a lot of, you know, you really have to care about people to go through that much education. And I have only respect for them, but I also think that we as patients need to become better advocates for our own health. And like you said, do the research, understand it, go to your doctor with educated questions. And also find doctors and practitioners who you work well with and who can be in your corner, because I think that's gonna hopefully be the changing phase of medicine and healthcare is us getting to be much better partners in our healthcare as we now have access to all this information. I think that's an awesome point that you made.

Angelique: Absolutely. I'm really fortunate that I've worked. So, my practice is integrating and I work alongside some amazing doctors and gynecologist, and I just feel that it's happening now. We're starting to see that shift and I'm so pleased.

Katie: Absolutely. Is there a particular book that has had a big impact on your life?

Angelique: "Why Zebras Don't Get Ulcers." I don't know if you've read that one.

Katie: I haven't. It's a great name, though.

Angelique: So, I now, in my talks and stuff, I talked about the being more zebra. So, I don't know when it was published. Quite a few years ago, by Robert Sapolsky. But it's "Why Zebras Don't Get Ulcers" and it's all about a guide to stress. And I remember, I was sitting on a plane going on holiday, and I was reading it iBooks and I was just like, "Yes, this is it. I need to dive deep." And that's what really got me interested in really truly understanding the mechanism of stress because we've spoken about it a top level, really simplified way, but what's happening underneath the hood is there's so much going on and that book, I found it incredible. So, it's definitely one that I'd recommend if you're looking for some additional learning-type book.

Katie: I just added it to my list. It sounds fascinating. And lastly, if you could spread a piece of advice far and wide, there will be a couple of hundred thousand people who hear this on this podcast, so, what would that advice be?

Angelique: Balanced hormones is about consistency above perfection, and it's about what you can bring into your life that you can do consistently that you're gonna see the major and the most impact, and the most

positive effect on your health. And so, I've talked about this in my book as well, it's about the things that we can do on a consistent basis as the 80-20 rule. It's not becoming obsessive about anything. It's not becoming extremely restrictive about anything. It's about finding this balance and be having gone through eating disorders and everything myself. I've been on either end of either caring or being too perfectionist about it or not caring at all. And just when I was going through binge eating disorder phase, but finding that balance and for hormones to work optimally, it's about consistency. And really, that's my wish for anyone that's going through hormonal conditions is that you can find that balance, and you can find that lifestyle that has a positive impact and positive...yeah, positive impact on your hormonal health.

Katie: Absolutely, such good advice. And I really appreciate your time in being here. This has been so much fun. I really appreciate your time, obviously your book, "The Balance Plan" is available where books are sold on Amazon, and I'll also have links to all the things that we talked about in the show notes at wellnessmama.fm. So if you are driving or exercising, you don't have to worry about writing it down. Just check the show notes out there. But Angelique, thank you so much for being here. This was a blast.

Angelique: Thank you so much for having me. It was such an honor. Thank you.

Katie: And thanks to all of you for listening, and I hope to see you again next time on "The Wellness Mama Podcast."

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