

# **Stress and Hormonal Dysregulation**

# **Guest - Julia Alderman**

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# [00:00:09] Meagen Gibson

Hello, everyone. Welcome to this interview. I'm Meagen Gibson, your conference co-host.

Today I'm speaking with Julia Alderman, a registered nutritional therapist and yoga teacher with over 17 years of clinical experience. She's worked with the Optimum Health Clinic for over a decade, specializing in complex fatigue-related conditions with clients from across the globe. As well as her clinical work, she also holds workshops, courses and retreats in a range of venues, both in the UK and abroad.

Julia has a lifelong interest in holistic approach to health, nutrition and yoga. She believes that listening to the body is the missing piece on many health journeys, and it is through her work that she empowers clients to reconnect with themselves and their health. Also, definitely check out Julia's yoga sessions on the Conscious Life platform. Julia Alderman, thank you so much for being with us today.

#### **Julia Alderman**

Thank you. Wonderful to be here.

#### **Meagen Gibson**

So I want to start, I know obviously, the context of what we're talking about today is hormones, but I want to start first by talking about stress. So how does our body respond to stress?

#### Julia Alderman

Yeah, great question. So cortisol is one of the key hormones that's involved in the stress response. So we have adrenaline and nor-adrenaline, which are the hormones that come into action first. So they're the quick ones, and then we have cortisol. So that comes in to really deal with that ongoing stress. So when we're in a stressful situation, our brain will perceive the stress.

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The hypothalamus will release a hormone called corticotropin-releasing hormone that then sends a signal to the pituitary to release another hormone that then signals to the adrenals to release cortisol, that's then released from the adrenal cortex. And that cortisol, along with the adrenaline, are what fuel this stress response.

But this whole hypothalamus-pituitary-adrenal feedback system is what we call the HPA axis, or the Hypothalamic Pituitary Axis. And it's a really finely tuned axis, essentially, because it needs to keep cortisol at the right levels across the day. So we don't want cortisol to be excessively high. We don't want it to be excessively low because it's so crucial for our health and well-being.

## Meagen Gibson

And I don't think a lot of people think about... Maybe it's just me, but by default, when I think about hormones like testosterone and estrogen, I think we all default to thinking about sex hormones. And there's a lot of hormones in the body and they all have specific jobs. And as you just named, we've got the stress response.

But I also know in context that cortisol, as a hormone, has a job other than just responding to stress. Stress can be the stress of waking your body from sleep. That is a stressor that is introduced for a function. But when we're in high stress from outside environments, not just trying to wake up for our day, which some of us find more stressful than others. If we're not just trying to do something ordinary like wake up for our day, that extended stress will throw that HPA axis you were just talking about out of over-functioning, right?

#### Julia Alderman

Absolutely. And it's really that prolonged, persistent stimulation of the stress response and the HPA axis that has been really linked to many chronic health problems. And working at the Optimum Health Clinic, working with chronic fatigue and fatigue-related conditions, this is absolutely something that we work with a lot. And there's lots of research around HPA dysfunction and fatigue conditions. And like you say, in terms of cortisol being a hormone, it's so vital for the stress response, but not just the stress response.

So it's also so important for metabolism, for supporting healthy blood sugar regulation, blood pressure to reduce inflammation, and supporting the immune system. And so when cortisol goes out, whether too high or too low, it's affecting a multitude of different systems. I think that's why the symptoms of HPA dysfunction are so widespread, because we have cortisol receptors in pretty much every cell of the body, affecting major organs and tissues.

# Meagen Gibson

And correct me if I'm wrong, and if I'm oversimplifying, please, because you're the expert. But it's almost as if... Because I think sometimes, especially in social media, it's great for giving us simple understandings of things so that we can deepen our understanding with an expert. But sometimes people limit their understanding to the oversimplification.

# [00:05:07]

And so we hear about lowering stress response and lowering cortisol as a healthy thing to do, but we desperately need cortisol for all of these other functions that you're talking about. And so it's almost like we're trying to address stress so that our body can produce the hormones it needs, and only the hormones it needs, for optimum functioning and be able to kind of assess where we're over-producing or over-responding and over-reacting to our lives or even under. I'm sure you can talk about it too, right?

#### Julia Alderman

Yeah, and you're absolutely right. I think in the media it's generally high cortisol that gets a lot of publicity and press and all the things we need to do to reduce cortisol. And as with all hormones, we don't want anything high, but we also don't want it low. So it's that sweet spot and getting it in the right range at the right time of day.

So, like you said, our cortisol begins to increase when we wake up, and then it should naturally increase further within the next half an hour of waking. And then it should actually gradually fall during the day, so it's lower at night, so we can then sleep. So what you don't want is someone having massively high cortisol at night so that they then can't sleep, or consistently low cortisol across the day.

Or sometimes what we see is what's called the Cortisol Awakening Response. So that first half an hour of the day where with some clients, it might be excessively high, which would really indicate that hypervigilant state where the body's really anticipating high amounts of stress.

Or if there's been real post-traumatic stress, we might see that Cortisol Awakening Response blunted. So it's low. And again, we don't want either state. We don't want it excessively high, we don't want it low. So we're working to regulate it. So it's working within optimum ranges across the day.

# Meagen Gibson

And obviously, we mentioned waking as... I don't want to necessarily call it a stressor, but are there other physical stressors or emotional stressors that can impact this HPA axis?

#### Julia Alderman

Yeah, I think it's a really great question because most people tend to be aware of the emotional stressors. So the classics of bereavement, divorce, redundancy, being overcommitted, trauma, etcetera. But there's actually a lot of physiological stressors. To give a couple of examples.

So if blood glucose levels drop, for example, that will be a physiological stress. So cortisol and adrenaline will come up to help to bring blood glucose up. So that might be the impact of restrictive eating, of going a long time without food. Maybe for some people, intermittent fasting, for example. All of those things for some people can really evoke that stress response.

Likewise, intense exercise without enough time for recovery can actually cause cortisol to be consistently high. A lack of good sleep can impact cortisol levels, HPA axis. Lack of nutrient dense

foods is another one. And then from a clinical perspective, things like food intolerances, infections, pain, all of those are also going to be a physiological stress, which is going to impact the HPA axis as well.

## [00:08:51] Meagen Gibson

Oh, absolutely. I don't know if other people have experienced this, but after COVID and lots of flus and things like that, I've become extremely aware of how stressful illness is on my system in a very observant like, wow. Just really feeling... Like feeling the way that my brain is responding and understanding that, okay, everything is inflamed right now. I need to be patient. I've got brain fog and I've got all these things that will recover. All things said, hopefully, once my illness is over. But being ill, being hurt, being sick, being in pain are stressors that we need to honor and take into account when we're assessing our functioning, right?

#### Julia Alderman

Absolutely. I think the more we can give clients that awareness, the more they can really cultivate that self-compassion and really recognize that they don't have to push. That there is this huge strain on the system. And as well as cultivating that self-compassion, also really giving that ability to cultivate those self-care routines of ensuring blood sugar is not dropping by eating in a more structured way, if it's appropriate. By really focusing on sleep hygiene, for example. So yeah, definitely.

#### Meagen Gibson

And you mentioned blood sugar first when you were talking earlier, and I wanted to ask. I wanted to follow up. Glucose down, cortisol up, adrenaline, up, fasting, all these things. Is this the explanation for being hangry or short or irritable or snapping at your children while you're making dinner, for instance? Asking for a friend.

#### **Julia Alderman**

Absolutely. Yeah. So that is the ultimate hangry scenario. And if the body's running on empty and running on stress hormones instead. Then, yeah, the body's going, "Feed me now."

#### **Meagen Gibson**

Yes. I've had many. Especially as I get older. It's always the ten minutes before dinner is served that everybody wants to be in the kitchen. And I'm trying to finish everything. And everybody's in there, and it's just like, "Argh!"

#### Julia Alderman

Yeah, we've all been there.

#### **Meagen Gibson**

It's very normal, but we don't have to accept it as normal. Right?

## [00:11:14] Julia Alderman

Yes.

## Meagen Gibson

All right. So when we're talking about all... I'm sure if anybody's hearing about the HPA axis and hormones and stress for the first time, it might sound a little bit overwhelming. So how do we rein it in? How do we get control and understand what is in our control? And how can we start to assess, especially as a clinician, how to impact and improve adrenal function.

## Julia Alderman

So there, it would really depend on the client. So I would say there's no two cases of HPA dysfunction that are the same. So it would absolutely depend on the client sitting in front of me. And that's where testing in clinic can be really helpful, because it means protocols can be that bit more tailored and specific towards clients.

So, as an example. So, for adrenal function, we quite often look at an adrenal profile test, which is a saliva test. So that would give us saliva readings across the day. So we got the cortisol on waking, half an hour later, morning, lunch, mid-afternoon and evening. So two different clients with HPA dysfunction might actually have very different adrenal stress profile results. So it would really depend where they're at as to what recommendations and advice we'd be putting into place. Shall I give some examples of that?

### Meagen Gibson

Yeah, that would be great. Because no two are alike. But let's give a couple of examples of the variety of outlooks and how people come in and your decisions. Yeah, that'd be great.

#### Julia Alderman

Yeah, sure. So, I mean, in terms of symptoms, I would say the majority of people in the clinic presenting with HPA dysfunction would have an element of fatigue, may have low blood pressure, low blood sugar, feeling tired but wired. So that sense that there's that exhaustion but actually, systems on alert, can't get to sleep. So there may well be issues with falling asleep or waking up. Up lots in the night or waking early in the morning. Maybe other impacts as well, such as frequent infections, poor resilience to stress. Maybe craving certain things, so particularly sugar and caffeine, which would help to boost cortisol more.

So even though in the long term, we want to reduce those things working with individuals. So on the diet side, be looking at supporting the physiology to ensure that blood sugar is kept as stable as possible across the day, so that it's not going high and low, and therefore producing additional stress on the HPA axis. When looking at blood glucose, that's where something like continuous blood glucose monitoring can be quite helpful for a very personalized approach. And it really helps clients to self-monitor and gives that additional element of empowerment. Because, again, no two people are actually going to respond in exactly the same way to food.

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And it also shows clients the impact that stress has on their blood glucose. So they may see blood glucose dropping massively when they're stressed or going up when they're stressed. So, yeah, often, if clients have HPA dysfunction, if cortisol is below normal, healthy levels, clients would tend to do best if they eat within the first hour or so of waking and generally having a breakfast that's slightly higher in protein and fat. And then we'll be looking at stabilizing blood glucose across the day.

So for some people that might be eating more regularly to begin with, if they can't go for a long amount of time without food, without blood sugar dropping. And really focusing on those complex carbohydrates, lean proteins, beneficial fats, lots of veg, and reducing the processed foods, sugar, caffeine, alcohol, but absolutely working at a pace that's right for the client. And like I say, particularly when you're reducing stimulants, for a client who has low cortisol, they may well feel quite a lot worse because they're not getting that additional boost. So those are some of the things we'd work with on the diet side and then looking at very specific supplements.

So again, depending on what came up on an adrenal test, looking at additional supplements. We may also test other nutrients alongside an adrenal test. So, for example, looking at electrolyte levels, maybe levels of B vitamins. Things like magnesium as well, and possibly looking at supplementing those as key nutrients required to make cortisol. May also look at specific adaptogenic herbs to support healthy cortisol responses. So things like Rhodiola, Ginseng, Ashwagandha, things like that.

With our clients in the clinic, often they can be quite sensitive to supplements, and I'd say adrenal supplements specifically for some clients, they can be overstimulating. So for some clients, we'd be working really gently. So it might be starting with a quarter of a capsule, for example, whilst working on other things to support their system, to tolerate a supplement. And then obviously working on lots of lifestyle factors to really support a healthy stress response. So looking at good sleep, hygiene, maybe looking at weighted blankets, supporting vagus nerve, getting out in nature, connecting, and then things like yoga, breathwork, meditation, all fantastic.

# Meagen Gibson

You mentioned so many things that I want to go back to.

#### Julia Alderman

Great.

#### Meagen Gibson

Yeah, I was like, "Oh, my gosh, I'm taking notes." I'm going to take another note so I don't forget. Thankfully, it's just four letters. So the blood sugar thing is fascinating to me. And I recently started working with a personal trainer about five months ago to start getting back in physical shape because I was afraid to do it on my own. Because I've gotten hurt a lot trying to throw weights around in the gym all by myself. And every person in that gym is wearing a blood glucose monitor now. And it's like, because everybody in that environment is hip to the fact that blood glucose and glucose monitoring is just so fascinating and so individual.

# [00:18:09]

So my sister and her entire family, her husband, her kids, everybody, all have type one diabetes. So that's like one type of glucose monitoring, obviously, for insulin. But even if you don't have any sort of type one or type two diabetes need, it's fascinating to see the things that will impact your blood glucose levels and how it will jump and what will make it jump.

And everybody is so individual. It's fascinating to me. And I had just recently, in the last year, learned about even the order in which, say, you have a sandwich and you've got your typical, your bread, your lettuce, your tomato, some sort of a protein, some more vegetables, some condiments. The order in which you eat them can impact what your blood sugar response is going to be.

And it's just been absolutely fascinating to me. So there's not a question there. But I would love it if you said just a little bit more about that educational component for people as far as their energy and cortisol response and how they're eating their food.

#### Julia Alderman

Yeah, and I think it's fantastic. And like you say, it's really an area of research and development that's expanded massively in the last year or two. And, yeah, like you say, there's such a spectrum of blood glucose imbalances, but I think for people who are experiencing symptoms of blood glucose imbalances, even if it's not a disease state, by regulating those levels, it can have such a massive beneficial impact on energy, on sleep, on cognition, on mood. So it's so important.

Personally, I think the blood glucose monitors are really helpful. Not as something to be used ongoing, but to do as a two-week trial to see how foods impact you and to then get that sense and then run with it and perhaps do it every few months. And I think it's also really interesting to see how other factors impact your response.

So you could have the exact same meal on two different days and have a different blood glucose response, and that might be because one night you've only slept for a couple of hours, because you've been traveling, etcetera and you therefore get a much bigger blood glucose spike the next day. Whereas on another day where you've had a really good night's sleep, you're feeling really calm, it's going to have a much reduced impact on blood glucose.

Likewise for women, depending on whereabouts you are in your cycle. Many women find their blood glucose will vary across the months, and often towards the end of the cycle, it being a lot more unstable, so more likely to go high and low. And like we said, the impact of stress in some of my clients, all the food they're eating is fantastically supportive of their blood sugar. But it might be that whilst we continue to work on their stress response, their blood glucose is still spiking and dropping, not as a result of food, which I also think is really fascinating.

#### Meagen Gibson

Yeah, I completely agree. All of it is because we have so much information available to us that I think sometimes we get the idea that everything is within our control and that every difficulty we're having is just a personal failure. And there's a space shuttle worth of technology and information out of our control, but under our influence, that's within us that we don't understand.

# [00:21:45]

And I think having the information that you can look at objectively and say, okay, it makes sense that my blood sugar dipped after I did four interviews that day, which is not a normal stress load for me. Or it makes sense that I'm craving sugar all day when I was up all day or up all night with a child, or jet-lagged, or whatever the case might be, I'm not beating myself up for my cravings or my exhaustion.

I understand it, and it makes more sense to me. And I will make different choices when I'm better rested. And instead of everything being our fault, it's just we understand what's happening for ourselves and give ourselves a lot of grace and support. Like I think you were mentioning earlier.

#### Julia Alderman

Yeah, 100%. And I don't know about you, but I certainly feel test results and continuous blood glucose monitoring, when it's applied to yourself, your conviction to carry out something is so much greater because you can see it. So it's not just that you've been told. You're not just imposing something. You can actually see, and then you can begin to tune in to see how that makes you feel. So I think there's so much empowerment in knowing how you respond to different things and test results.

## Meagen Gibson

Yeah, absolutely. And just to point again to clinicians. Because with all these wearable devices, again, it can make us feel hyper-responsible for our own health. And I know I have a lot of support, not only from all the experts that I know at OHC. My sister-in-law is a functional nutritionist. I've got a trainer. If you have the ability to bring in really smart, intelligent people with advanced degrees, and you have that accessible to you. Please rely on them.

Get somebody just like Julia to guide you so that you don't have to make sense of all of it, because all of that information can be overwhelming. I've never met anybody who wanted to shame me for my choices or my food or my stress. It was just like, "Okay, so here are the choices that are available to us that might move the needle just a little bit and improve your experience of your life and your livelihood and your energy. 10%. Let's work on 10%."

#### Julia Alderman

Yeah. Thank you for sharing that. Absolutely. I mean, I think with the expansion in health and wellness information, there's also a massive expansion in confusion and people feeling really confused about what to do. Or feeling like something is really beneficial, and then later on discovering that actually it wasn't.

So I think going to a professional really takes away that confusion, and you can have a really structured pathway. And absolutely in the clinic, the last thing we want is for diet and lifestyle change to be an additional stress. So we're absolutely working with each person with where they're at, their capacity and ability to change. And it's absolutely that partnership. It's not a case of instructing and imposing, but working together in that partnership.

# [00:24:54] Meagen Gibson

Absolutely. And as you mentioned earlier, when we're talking about supplements. Again, we have so much information online, and so many people are not necessarily misled. But somebody will say, "This particular supplement really helped me with this issue." And if somebody with the same issue wants, they can buy it online. It's easily accessible to them in that way.

But without the guidance of somebody like you, who can titrate that out and say, like, "I've had patients just like you or similar to you who have struggled to incorporate this into their system, and it's caused additional stress. So let's try a very titrated, conservative model and see if that helps you and how well you tolerate it. Instead of you just, like, ordering something in the mail and popping it and wondering why you feel worse and not better."

## Julia Alderman

Absolutely. And 100%. There is no one size fits all, whether it's food, diet, lifestyle. It is a very personalized approach. And what fits and suits one person won't fit and suit somebody else.

## Meagen Gibson

And lastly, before I let you go, I want to talk about yoga, because you've got a good presence on Conscious Life. You've been in several of our conferences facilitating yoga sessions for our folks, and you're doing the same in this. And so I'd love it if you could just talk about movement as medicine and your approach to yoga and how it can support people's stress and HPA axis and nutrition and all of the things.

#### Julia Alderman

Thank you. I mean, for me, yoga has been such an important part of my life, and I think it's such a powerful tool to embody and to regulate the nervous system. And I think particularly when you're beginning on the path of yoga, movement is a much more accessible way to get into it. And then later on, then deepening that connection and working with the breath and meditation.

But for a lot of people to begin with, actually sitting still and meditating is going to be too uncomfortable. And you need to move. And I think as well, we all need different parts of different things in our life. Sometimes we need to move. Sometimes we need to be still. Sometimes we need to focus on the breath.

And for me, really, as my own yoga path has progressed, it's become much more about practices that are really accessible and things that can be done through the day. So it doesn't have to be that you have to have a two-hour block to do your practice. So it is things that you can do continuously throughout the day, whether it's mantra, breathwork, as well as having formal practices, those check-ins.

And I think as well, nutrition can really be that yoga path as well, in terms of increasing our awareness of ourself. So in terms of increased self-knowledge, how our body works, how it feels, being able to respond to our own cues and knowing ourselves at a deeper level. For me, that's what it's all about.

## [00:28:01] Meagen Gibson

Absolutely. Beautifully said. Julia Alderman, how can people find out more about you and your work?

#### Julia Alderman

Thank you. So I am a practitioner at the Optimum Health Clinic and they can find me through the <u>Optimum Health Clinic</u>.

#### Meagen Gibson

Fantastic. Thanks so much for joining us. And obviously, everyone, tune in for Julia's bonus sessions.

#### Julia Alderman

Thank you.

#### Alex Howard

I hope you enjoyed watching this interview with one of our practitioner team here at the Optimum Health Clinic. You may not be aware that the Optimum Health Clinic is a sister organization to Conscious Life, which is hosting and producing this online conference.

#### **Alex Howard**

If you want to find out more about the work that we do here at the Optimum Health Clinic, you can request a free information pack. You can also book a free discovery call by going to our website, which is <u>www.theoptimumhealthclinic.com</u>. Thanks for watching.