



Conscious Life presents

Riding the Hormonal Wave: The Rise of Imbalances

Guest: Evan Brand

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[00:00:09] Dr Anu Arasu

Hi, everybody. Welcome to the Hormone super conference. I'm Dr Anu, co-host of the conference, and today I'm joined by Evan Brand.

Evan is a functional nutritional therapy practitioner. He's also the founder of the Functional Academy for Medicine and Epigenetics. And he has a podcast that has accumulated over 22 million downloads called [The Evan Brand Show](#). Welcome, Evan.

Evan Brand

Thanks so much for having me.

Dr Anu Arasu

It's absolutely great to have you here today. Evan, tell us about your experience of seeing women with hormone imbalances.

Evan Brand

I see a lot of men with hormone issues too, so we'll try to make sure we include men too, because they often have major issues with testosterone. I'll start with men and then go to women.

If you look at the latest data on men, for example, we have on average, the lowest testosterone in recorded history. If you look at your grandfather's testosterone on average versus your average man in his 30s today, it's significantly less. I see men in their mid 20s to early 30s that have lower testosterone levels than men in their 70s and 80s.

We're in a huge epidemic now of men that simply just don't have enough hormones to be men. I could go down a huge rabbit hole with that. Obviously this affects erectile issues. You see, even mid 20-year-olds now are taking Viagra and other pills for trying to get erections, which is just crazy.

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With women, you see, I've even seen this on social media. There's videos on Instagram and TikTok of these women in their 20s, in a weird way, it almost seems like they're celebrating this idea of what is being considered premature ovarian failure.

Some of these women are showing up with gray hair in their 20s and 30s now. They're having issues where they're not ovulating, maybe they have eggs, but for some reason they're not ovulating. Maybe the period is gone completely, or they have irregular menstrual cycles. If they do have a cycle, it could be that they're having massive bleeding or clotting issues. Maybe there's some estrogen dominance component to this, to where these women now have anemia problems because their bleeding is so terrible because of the hormonal imbalances.

So now they're exhausted and they can't perform well, so they sit in bed all day. And this is not an uncommon situation like this is becoming the majority of women now. It's kind of scary, really, because I run a lot of testing on people. I run more tests than almost anybody on the planet. I know this because the labs tell me that I'm in the top ten worldwide for the most labs being run under a practitioner.

I'm looking at hormones via urine and saliva, I'm looking at brain chemistry using organic acids testing. I'm measuring nutrient levels in the urine. We do some blood to look at thyroid hormone and other hormones and antibodies in the blood. And then I do a lot of stool testing as well, where I measure various infections. So we look for parasites, we look for certain bacterial overgrowth, we look for candida, gut inflammation. Across the board, what you're finding is that it's not just one thing affecting hormones, it's 4, 5, 6, 7, 8, 9 things that all add up.

If you're trying to fix your health, maybe you follow some nutritionist on YouTube and you love the way she looks and you think if you just follow her little 'What I eat in a day' video that you're going to fix your problems. But in most cases, you can't eat your way out of this, especially when it comes to hormones. There are some things you can do diet wise to tweak it, but oftentimes you have to dig deeper.

Dr Anu Arasu

This is such a wealth of experience you really have, you are collecting that much data. What are some of the common patterns that you are seeing in men and women with hormone imbalances?

Evan Brand

So the men, it's the low testosterone, higher estrogen. So the testosterone-estrogen ratio is off. These are the guys that have thinning hair, they have man boobs, they have little to no libido, or they have poor erections.

The females, we're often going to see higher estrogen in relationship to progesterone. And so progesterone is very good at helping boost GABA. And GABA is your calming neurotransmitter. We find so many women now that are just anxious all the time and hopefully they'll seek out natural remedies. Maybe before they jump on Xanax or lorazepam or antidepressants, maybe they'll be able to investigate their hormones.

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Because if you can simply help regulate and get progesterone in a relative balance with estrogen, progesterone helps to raise GABA, therefore calming women down. So even in their 20s and 30s, we're seeing women that just don't have enough progesterone and they're just running around short of breath and anxious all day.

This is compounded by fasting, if they're skipping meals because they want to look sexy, so they're hearing about intermittent fasting. So now they don't eat anything until 2PM. And then they're trying to cram all their proteins and fats and dietary needs in one to two meals. So that's difficult on the blood sugar.

On the brain side, we're seeing issues with neurotransmitters. The cool thing is you can measure your dopamine, your endorphins, your serotonin, all via organic acids testing. What happens is, if you think about taking your car in for emissions testing, you can measure what's coming out of the tailpipe. Well, we can do the same thing with the urine. We can measure these organic acids, which are linked to certain chemicals and nutrients in the body. And that's how we can look at a marker. For example, it's called homovanillic acid.

If that's low, that means there's low dopamine. These are the women that have issues getting out of bed, getting motivated. Maybe they have a cluttered house, or maybe they have a garage that has so much stuff in it, they can't get motivated to clean and organize their garage. You'll often see on paper the dopamine is low.

These are the women that may get stuck on social media, they're just sitting on the couch scrolling. They know they have stuff to do, but they just can't do it because there's just not enough dopamine production, likely because there's an issue with the gut or toxins that have affected the brain's production of dopamine.

These women that have hormonal imbalances, we'll also measure the urine for mycotoxins. These are things that you breathe in, from being in a water damaged building. If your home, your office, your school, your dorm, your college, your daycare when you were a child, if genetically you don't detox well, mycotoxins are something that builds up. These are basically mold farts that you're breathing in.

If a building has had some sort of a plumbing leak or an air conditioner has had an issue, like in my attic, in my current house, we had condensation in our air conditioner, and that came through the ceiling. That condensation was so much, it puddled up and came through the ceiling. It's so easy to happen. But when you're exposed to these mold toxins, they're highly estrogenic. This is going to create more of the PMS, breast tenderness, irritability, anxiety, depression problems. Like I said, this is not uncommon.

So that's how it looks. You see the brain piece with the neurochemicals, the brain chemistry, the neurotransmitters. You see the hormones via urine or via saliva, and then you see the toxins. Gut infections, I would say would be a fourth. Those are kind of the big pieces of the puzzle.

[00:07:42] Dr Anu Arasu

How about for men? What is the cause, do you think, behind this ratio of low testosterone to high estrogen that you're seeing so commonly in men?

Evan Brand

It's complex, like everything. But have you seen those articles on how much plastic we're consuming, even by accident? It's somewhere in the ballpark of a credit card worth of plastic, I think it was per year. I guess I need to look that up real quick, so I'm speaking truth here, but it's massive. The microplastics are everywhere. I live close to the beach, and I go as much as I can and walk and try to get out there. And there are certain times of the year where you will just see, as far as the eye can see, tiny little pieces of plastic.

Okay, so this was a study on this. If you just type in ingested microplastic particles, it says here that it is somewhere equivalent to 50 plastic bags per year, one credit card per week. So what I'm saying is we're literally consuming a credit card's worth of plastic every single week.

For example, if you go to, let's say, Chipotle, a chain restaurant where you've got supposedly higher quality food, maybe there's a little bit of plastic that's a wrapper or something else that's in that material. Maybe there's shedding from the bowl. Maybe there's something integrated into the fibers of your clothing if you're wearing polyester clothing. So I try to get away from that. I think that's the biggest one. It seems like it's the plastic exposure.

There's a group called Ocean Cleanup, I think is their name. And luckily, they're out there with these huge ships out in the ocean, out in the Pacific. I don't think people understand how much plastic we really have on this planet.

I went to a birthday party yesterday for my kids, actually it was a girl's at my daughter's school, and just the amount of plastic garbage from one birthday party was insane. You're talking cupcake wrappers, lollipop wrappers, plastic plates, boxes that all the food and stuff came out of. This is one birthday party. How many birthday parties are happening, per month, where there's this much plastic for a two-hour event? But anyway, I could rant on that.

But here's the deal. Out in the Pacific Ocean, in between California and Hawaii, you have the great Pacific garbage patch, which is literally, supposedly, it's probably bigger than this now, but the last time I read it was somewhere between three and five times the size of Texas.

I don't know if you've ever driven through Texas, but it is a huge state. It takes forever to drive through Texas. Imagine that, triple it, that's how much plastic is out there. This stuff gets up in the rainwater. There was a study where they put little cups, very simple tests, but they put cups in Rocky Mountain National Park in Colorado. Pristine area, likely where no human has ever stepped foot. And they found plastic in those cups that came from the rain.

If you think you're going to escape this, you won't. Now this sounds really doom and gloom. It's like, "What do I do? I can't hide from this. It's raining plastic fibers. What should I do? And how do I prevent myself from having hormone issues?" My advice is try to rid everything you can out of your personal fabric.

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I would go through your closet and anything and everything that has polyester, which is basically a plastic fiber, nylon, rayon, I would just try to detox your whole closet. Now, this may cost you \$500 to do it, but it's worth it if you can afford it. Maybe you buy one piece of clothing at a time, go to a holiday special, and maybe you get half price on your t-shirt.

This polo I'm wearing, it's 100% cotton. I have wool shorts on, I've got wool boxers on, I've got no socks on, but if I did have socks on, they'd be made of wool or cotton. I would try to ditch any man-made materials. People talk about switching out plastic water bottles, sure, that's easy, but I just worry about what people are wearing. When you're running your dryer and you have a vent to the outside, if you're washing your Lululemon pants that were \$100, you're just shedding out all these fibers, you're pumping those out into the air. So that is a big one.

And then also your environment as well in your home. If you work from home especially, this is even more important. If you have mold toxicity in the home, meaning your kitchen sink leaked, you didn't catch it in time. Now you see a little white fuzz, you think it's just dust. It could be aspergillus, which is a really common mold that produces various toxins that affect hormones. There's also another mold we test for called fusarium. This mold makes a toxin called zearalenone, which is highly estrogenic, far more estrogenic than soy.

If you're listening to a nutrition coach and they're like, "Hey, get rid of soy", maybe that's good for you, but the mold toxin will create far more estrogenic effects in the body. And you can measure this stuff. This is not like airy-fairy stuff I'm just making up on the fly here. You can quantify it. You can look at it.

The male says, "Hey, I've gained 30 pounds of belly fat I didn't try to gain. I'm eating clean, what I think is clean, but yet I have no sex drive, no energy. What should I do?" We look at their urine, and there they are, they're full of mold.

Now, the plastics, I don't know. Maybe there's a test for that. But so far, I don't know of any, like how much plastic is in my body. I don't know how to test that, and if it's in there, how do you get it out? I have no idea.

Dr Anu Arasu

Wow, it's so frightening. Hearing those stats on plastics is just ugh. But I guess hormones are a bit like the canary in the coal mine, right? It's one of the first places where all of this stuff shows up.

Evan Brand

Yeah, this is true when you put it like that, because there's a process in the body that's called the cortisol steal. If you just google cortisol steal, you can see a picture of all of your steroid hormone pathways. At the top you have cholesterol, which is going to be the building block for your hormones. But what happens is when you're extremely stressed because you're working too much, you're staying up too late, maybe you're on your phone all the time.

I suspect, just based on me, measuring my heart rate variability, I hooked up a Bluetooth monitor to my chest, which I don't really like to blast my chest with Bluetooth, but I wanted to test this. I found

that if I was on my phone, if I'm scrolling on my phone, watching videos, interacting with my phone, my heart rate variability score went down, indicating that my nervous system was more stressed. You could test this for yourself. My wife and I have both looked at it, and it's not uncommon to see someone picking up and checking their phone 100+ times per day.

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Now, what does this have to do with hormones? Well, maybe there's an EMF component. I have measured Apple Watches. Instagram flagged my video. It had nearly a million views and 40,000 likes, and then Instagram flagged it as misinformation, even though I was showing with an EMF meter, comparing the radiation coming off of an Apple Watch and comparing it to a microwave, and the Apple Watch was very similar. RF is what it's called, radio frequency emissions. It was very similar to having a microwave strapped onto your wrist in terms of the levels. I suspect that's a piece of the puzzle.

Now, some argue it affects the blood-brain barrier, some argue it may affect hormones, but I don't think anything super conclusive is out. I would rather not take the risk. So I wear a dumb watch, I wear a Casio, it's got a compass, it's got a barometer, it's got the time, it's got the sunset time. That's plenty enough for me. I don't need anything like that influencing me.

But the chronic stress of that, if you're on your phone all the time, or let's say AirPods and Apple Watches are really aggravating and setting up the immune system for some sort of hyperreactivity, well, your body is going to divert the hormones of pleasure and libido and calmness for the cortisol response, and it's as if you're running from a bear all the time.

Sex drive, libido, et cetera, that's all a luxury if you're running from this threat all the time. I find that if you look at hunter gatherers, for example, on average, they work about 4 hours a day. So give or take somewhere in the ballpark of like 18 hours a week during the work week, where typically the average, quote, 'American workers', like 40, maybe 50, 60. I'm not saying everyone can go down to 18 hours a week, but if you're just constantly going, going, going, and you have no time for rest.

Here in America, I know in other countries it's different, but in America, a nap is like a forbidden thing that's for lazy people. Whereas you look at the Hispanic culture and they may still close down for an hour or two in the day. I've heard in Europe, maybe there's some parts, maybe Spain or somewhere where a nap is still like an encouraged thing and that can be huge.

When I had adrenal issues years ago, and my cortisol levels were flat, in the middle of the day, if I needed to, I would just lay down. I'd lay down on the floor, on the bed, on the grass, on the dirt, wherever I needed to. I'd just lay down for 10 minutes and just try to close my eyes and just rest. And that simple thing was what allowed me to really get my cortisol levels back up in range.

I was using adaptogenic herbs as well, but so many of us are just trying to hustle, hustle, hustle. I don't know about you, but even in the last five years, life just feels way busier and I don't know what to blame for it.

[00:17:28] Dr Anu Arasu

Right. We get so many inputs and whether it's, as you say, the frequencies in the environment, but what I'm hearing is that the hormones, in a way, is a great place to start because every single aspect, if we feel out of whack, and that could be stress or low energy, or problems with libido or problems with sleep, any signs of hormone imbalance, we end up casting the net so wide to try to figure out where things have gone.

Tell me, what's the link between hormone imbalances and neurotransmitters, or the mood.

Evan Brand

Sure. I alluded briefly to the issue with progesterone deficiency and how that relates to GABA. We can actually use supplemental progesterone for females, we could use it for men as well. It's readily available, a lot of the professional supplement companies that I use manufacture progesterone creams.

Even just a tiny bit of progesterone, 20 milligrams in some cases is enough to help boost the GABA levels to where these women are now less anxious. They can sleep, so they get rid of their insomnia. Maybe this helps with hot flashes, it could help with PMS, it could help with irritability, it could help with depression, et cetera. You just feel much more grounded. I know, for me, if I take a progesterone in the evening, the next day I'm calm, I feel good, I feel really calm.

That's one link. The other link, I would say, is in many cases, the estrogen dominance problem is compounded by the mycotoxins. Now, how does this impact the other neurotransmitters? I'm not sure if there's a link. But what I'll say is the most crazy women that I've worked with, on paper, have the highest levels of mycotoxins.

Let's say you've been to a naturopath or maybe a hormone doctor, maybe a more functional endocrinologist. They could be playing with hormones by giving you pellets or creams. Maybe they're trying to boost estrogen or lower it, or they're tweaking your testosterone. And there's all these little mixtures of hormones I see women taking. But here's the thing. There's a pathway in the body called glucuronidation. Essentially what it does is it wraps up your hormones in a straitjacket through a process called conjugation and then excretes them out of the body.

However, if you have toxins, this could be glyphosate. Other pesticides that have damaged the good bacteria in the gut, you start to develop dysbiosis. These are clostridia, morganella, pseudomona, strep, staph, and many others, citrobacter. These bad guys, these bad bacteria thrive when your good bacteria are killed off due to non organic food.

This is the reason you want to try to eat as 100% organic as you can. Because the pesticides in a strawberry, for example, the Environmental Working Group tested strawberries. They found that some batches of strawberries that were commercially grown with chemicals had 22 different pesticides in them.

You got to go organic, because here's the link to the hormones and how this affects, literally your marriage, is the pesticides in the food kill the good bacteria. When the good bacteria die off, the pathogenic bacteria take their place. It's like an invasive species. You cut down the good trees, and

then some non-native plant comes in and takes over the whole forest. So same thing, if you think of the gut as this forest of bacteria, the bad guys move in.

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Now, those bad guys, what they do is they will produce an enzyme called beta-glucuronidase. The higher that number goes, the more you are recirculating toxins and hormones. So if you go on bioidenticals, you're doing pellets, creams, whatever, injections for men. If that pathway is messed up because of the bacterial dysbiosis, you're making yourself worse. What we have to do is get that enzyme working better, meaning that we can now wrap up excess hormones and then flush them out through the body.

If you feel like the hormone cream or whatever you're doing is not working. We can do a stool test that'll measure that enzyme, the beta-glucuronidase enzyme. In these hormonal women, it's always messed up. It's always high with probiotics, certain nutrients to help support that pathway. And then using herbal antimicrobials, basically natural antibiotics to treat the dysbiosis, we can get those numbers down, and therefore their hormonal processes work properly.

Dr Anu Arasu

So we need to be correcting the hormone imbalances because we are living in an environment today where it's just so prevalent. But we also need to be looking really wide and casting that net super wide.

Tell me, Evan, what about epigenetics? What role does that play in all of this?

Evan Brand

A lot of people use genetics as a cop out, in a way. What I mean is, they think, "Okay, well, my family ended up this way. If you look at my mother, you look at my sister, you look at my aunt, they all had XYZ disease diagnosis", Hashimoto's or some other condition, and they just think, "Okay, that's my destiny. I'm going to end up this way. It's no surprise I'm overweight, because look at XYZ and my family. They're overweight as well, they're sick as well, they have thyroid issues as well".

I think it's a mistake to use your family as a reason to give up. And you think, "There's no way out of this. This is my destiny. Everybody else in the family had heart disease. Everybody else had hormonal problems and terrible menopause. My mom, she was so miserable through menopause. I guess that's just my story, too". I'm like, no, that's not it.

Don't compare the people that are eating junk and not doing organic and staying up too late and lathering themselves with parabens and their conventional skincare products, and wearing toxic makeup, and wearing fragrances in their conventional laundry detergent, and using dryer sheets with fake smells, which also can disrupt the endocrine system.

Don't look at them and think, "This is my story", because there's so many variables you can change from cleaning up your makeup, going fragrance free completely with all your soaps, your conditioners, your shampoos. There's a million ways that you can get exposed to these xenoestrogens, these estrogen-like compounds from personal care products.

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Really, you should only need organic soap, maybe some organic shampoo, if it has essential oils in it that has some real fragrance. It's not fragrance oil, it's essential oil from the leaf, the stem of the plant, it's probably okay, but you shouldn't need that much.

If you do want makeup, you can look up a database called Skin Deep, and you can review all of the different mascaras, foundations, creams, powders, whatever potion you want. You can review that on Skin Deep and see how clean your products are. I would just encourage all these women to try to clean this stuff up.

I'm trying to figure out what this smell is. In the town where I am, in this beach town here, everywhere I go, all these women smell musty. My wife and I were just talking this morning, I'm like, "There's that musty perfume again". I don't know if there's some new hip fragrance out that we don't know about, but like every woman that passes me, it just smells like musty perfume. It's not going to be natural. That has an impact on you.

If you think about your skin as an organ, think about how you dose yourself with hormones? Well, you can rub something on your skin and absorb it. What does that say about your creams, your lotions, your sunscreen? It's so easy to swap this stuff out, and it pays huge dividends.

Dr Anu Arasu

What's been your own experience? I guess when we're coming into this world, it all sounds so overwhelming. But you've been on a bit of a healing journey, haven't you? You've healed yourself. What was your own experience?

Evan Brand

Yeah, I think all of us are. The story goes back further and further the longer I tell my story. If you look at what happens with babies, I test one-year-olds, two-year-olds, three-year-olds. Some of these kids are more toxic than their parents or their grandparents. On average, the average newborn is born with 188 different chemicals in their body.

These are man-made chemicals. We can't even test for all of the chemicals that are in the body, but we can via urine. We can do a pediatric collection bag on these kids. I test babies all the time, and they're full of toxins. They're probably the most toxic people on planet Earth, just based on my data, would be children under age ten.

I don't know what I was given as a baby, in terms of my toxic exposure, but I do remember having mold exposure early on. I remember being a young boy having mold exposure in various homes. My grandmother's house had flooded, I remember being down there. I remember having cold hands and cold feet for a long time as a kid.

If you have circulatory issues like that, it could be related to mold. Because mold affects nitric oxide, which affects blood flow. Guess what you need for good erections and good arousal, not in

just men, but women, too. You've got to have good blood flow. If you have toxins that are affecting blood flow, that's going to create brain fog and fatigue.

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I had it all, brain fog, fatigue, depression issues, some anxiety, but that was when I had parasites, I had gut infections. Once I treated those, my anxiety got way better. Mold can cause massive depression, though. If you just feel like today sucks and there's no reason for today to suck, that's a sign that there's something underlying. Depression is really more of a symptom.

Back to the whole epigenetic thing, too. People may look at their mother and say, "Well, she's depressed, so I'm going to be depressed, too", and that's not true. Now, if she had mold toxin that's affecting her dopamine, she could have passed that through the placenta to you. And if you were breastfed, that could have gone through the breast milk to you as well.

My story is a culmination of a lot of things that all added up. It was some parasites, some bacteria, some candida, some mold exposure, some tick-borne infections, Lyme, bartonella, and babesia. You can also get bartonella from mosquitoes. Bartonella is a bacteria that creates a lot of inflammation in the capillaries. It'll also cause crazy mood issues, depression, anxiety, fatigue.

Over the years, and as I'm working clinically, that's the best way to learn, just get your hands dirty in the trenches working with people. I just started to look at what's happening in others, and then I go, "Oh, crap, I should probably test that for myself". And then, "Uh oh, here's something else I got to fix". It's almost like this giant game of human body whack-a-mole, in a sense, where you fix the parasites, and then now there's this to clean up. You fix that. Now there's mold to clean up. You fix that. Now there's this to clean up.

Of course, what happened with COVID really introduced a totally new thing into people's immune systems. People that were, myself included, people that were feeling really good, now, all of a sudden, they got thrown off again, and there was immune, inflammation, a brain component to it.

Actually, part of my experiment now, I'm actually wearing it on my arm right here is a nicotine patch. There's some new studies that have come out, just this year, that the molecule of that virus, and also what comes from the injection, is getting stuck in, what's called, the nicotinic acetylcholine receptors.

Acetylcholine is another neurotransmitter that's great for mood and for memory. I was thinking, like, "Okay, I still feel a little bit brain fog. I don't know if I fully recovered from this thing". There's lots of case studies showing up in the medical journals about nicotine being able to clean those receptor sites out.

I had a woman, and this will tie into my story as well, but I had a woman who, she was losing 600 hairs a day, she was counting. Massive hair loss. Came across those papers, found some doctors recommending this. She tried that. And the nicotine, in three days, took her from 600 hairs a day to 16 hairs a day, in terms of her hair loss. It basically stopped her hair loss. Her brain fog completely disappeared, and her energy just went through the roof.

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I'm still always experimenting, I'm always trying to be open to these new ideas, these new things that can help, because we got a lot of people that need help right now. 100 million plus is the estimate of people that have long haul.

I think many of us don't recognize how tired, or how foggy, or how spacey we are until it starts to improve and they go, "Oh, man, I was actually in a slump there for a while", and this could be months to years. And often this is in the people that had the mild cases. So for like, "Yeah, I was sick for a couple of days. Now I'm over it", it could be that you experience more long haul stuff than anybody else. I know that's another can of worms, but this is how I think about these things clinically, and this is how I try to tie all of them in.

Dr Anu Arasu

The immune system is huge. What is the link in your experience between hormones and the immune system? It's a pretty loaded question, but any kind of pattern, more basic patterns that you see, if there's anything.

Evan Brand

There's definitely a link in an issue between flatlined cortisol and immune function. When we run either saliva or urine to measure 24 hour cortisol, we can also measure estrogen, estradiol, progesterone, DHEA, testosterone. We can measure all the other hormones.

But if we just try to isolate cortisol, I find the people that have these flatline cortisol rhythms, these are the people that... It's the equivalent of you having 10% battery on your iPhone and you're going to try to make phone calls all day. It's going to be pretty difficult. I find that if the cortisol level is flat, these are the people that have more autoimmune issues.

So I'm assuming that, I'm sure I could pull up some papers on this to confirm, but I'm assuming that if hormone levels have become depleted, meaning you've been so chronically stressed for so long that now the cortisol level looks flat. It appears those people have more issues with Hashimoto's, for example.

If I were to paint the picture and pull some clinical cases out of my head, the women that I've seen that had Hashimoto's, so that's autoimmune thyroid issues, where we see thyroid antibodies on the blood. Those women typically have flat cortisol rhythms. So I'm wondering if the flat cortisol pattern is then leading to the immune system not being able to handle itself, and therefore these antibodies, by accident, attack the thyroid. But that's about as far as I can go right now without digging into it more.

Dr Anu Arasu

Wow. Yeah, it's just so big. I think it's a real topic for today because we are seeing this increasing prevalence of autoimmune issues. And then, of course, post COVID, the immune system has just been at the forefront of so many issues.

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What about fertility? That's another area where I think we're seeing a lot of changes in things like men's sperm counts.

Evan Brand

Oh, gosh.

Dr Anu Arasu

Whats your view on that?

Evan Brand

Oh, gosh. Yeah, it's huge. Just like testosterone, sperm quality, and sperm quantity, and sperm motility are way down. Of course, the virus does that, but also mold. If you type in 'mycotoxin fertility', let's say you go to PubMed, or you can go to Google Scholar, if you want to pick through the medical literature on your own. I think it's great for people to learn how to read these things, it's not super complicated. Sometimes it gets geeky, but a lot of times, you can at least read the conclusion of the study.

But if you type in 'mycotoxin fertility', it affects the testes and men. The mycotoxins, remember these are inhaled. Does it come from moldy coffee? Does it come from moldy chocolate? Does it come from moldy corn and other grains, yes, but I think the majority is from inhalation. The mycotoxins directly impact the testes, which then affects the quality, the quantity, the motility, and the DNA of the sperm, which could then potentially increase the risk of birth defects and other problems.

So it does have a direct impact on men as well as it does females because it affects the ovaries. So if you put in 'mycotoxin ovary', you'll find that the mold toxicity affects the ovaries as well. Maybe this is why we're seeing this whole premature ovarian failure. Because think about it, 100 years ago, you were outside a lot more than today. You didn't have screens and technology to keep you indoors. The women were probably out helping on the farm.

I know my grandparents, they grew up out in the country, and they were on hundreds of acres, and they were keeping up with the cattle, and the pigs, and the chickens, and the crops, and they were outside all the time. Even if their house was moldy, they weren't in it all the time. Now, where we're in our moldy boxes too often.

If you put in 'mycotoxin fertility', you'll see that it's a huge link. I've had many, many women come to me that say, "Hey, they told me I can't have kids. My endocrinologist says that I'm infertile", often I point to the male, and I say, "Well, well have you checked him out?".

Because there have been some cases where, to me, a female looks good on paper, and then we luckily get the spouse on board. The male has all sorts of issues. Gut issues, toxin issues, et cetera. Both parties, if we can get a workup on them, we often find that there's a toxicity component in both of them.

[00:35:20]

I've probably had two or three dozen babies as a result of my protocols. Many of these women actually get pregnant in the middle of a protocol, which is kind of cool, because I would prefer that they complete the protocol. We fully detox them. We confirm that all the chemicals, the pesticides, the mold, we confirm that all that's resolved. But sometimes the fertility and the hormones come back roaring once we do these things to support the adrenals, the liver, the thyroid, the gut.

All of a sudden, three, four months in, they call me, and they're like, "Hey, I'm pregnant. What do I do now?" I'm like, wow. Because you've been trying for ten years to get pregnant, and it wasn't a deficiency of IVF. It was toxicity. I'm not opposed to IVF, but I would say if you're having trouble conceiving, and this is as, I'm a father of three, so I can tell you this with personal experience, if you're having trouble conceiving, that should be a check engine light for you.

That shouldn't be something to where you automatically go and get an artificial insemination-type method done to you. I'm not putting anybody down for this, but I'm just saying, I see so commonly women that have actually done it, and I've seen IVF women that have had miscarriages as well. This is the check engine light saying, "Hey, something's not right. Something's not right. Something's not right." And they keep beating on this door of trying to have babies, and there's something not right under the hood.

I have seen women who've done IVF, they've had healthy pregnancies. The babies appear to be healthy, and the women are like, "Hey, I'm ready to recover. I never recovered after that birth", we measure those women, and there's all sorts of issues. I celebrate, and I'm like, "Hey, thank God the baby's okay, everything seems healthy. But, wow, I see why you needed IVF. You're full of this. You're full of that. You have these infections. Your thyroid looks like this. You're anemic, you have these nutrient deficiencies. Your brain chemistry is messed up. Like, I'm amazed that you were able to have a healthy pregnancy."

This is where I would start. If you're fatigued, if you're stressed, if you can't sleep, if you can't have babies, if your sex life is dead, if your marriage is on the rocks, do these few key tests that I'm describing, and get this functional medicine workup done so you can see what you're up against. I've heard IVF is \$12,000 to \$20,000 US, maybe more in some cases.

The stuff I'm describing to you, a box of some detox support, could be a couple hundred bucks. You're actually probably going to save money, but then you're actually going to reduce your issues in the future, because we're talking more in the good years. We're talking from childbirth to maybe age 50.

But what about when you're 60 and you're 70 and beyond and you've had all these issues the whole time? Well, there's a huge link between mycotoxins and neurodegenerative disease such as dementia, Alzheimer's, Parkinson's, put in 'mycotoxin Alzheimer's', it's in the literature.

When you think about your aging parents and you think about how they're losing their cognitive function, we just wait, at least in the US, I don't know how it is where you are, but in the US, we basically wait until these people are demented enough, and then we throw them in a nursing home and basically have professional paid babysitters to take care of these elderly people. I've had people in their 70s and 80s that we've tested, and they have major toxicity built up over the

decades, if genetically they don't detox well. We detox those people and their cognitive function significantly improves.

[00:38:54]

So don't think about this just in the short term like, "Hey, I want to be sexy and energetic in my 30s and 40s". I'm helping you in the long term, too, because if you wait till you're 60, 70, 80, you're losing your memory, you're getting lost in familiar places, you're forgetting the name of your best friend. You can never find your keys, you lose your wallet, you can't find your phone. You walk into the pantry, you can't remember why you're in there. These are the more severe neurodegenerative issues that maybe you can reverse, but it would be better to try and stop it from happening.

Dr Anu Arasu

I think this will resonate with so many people because we are seeing such an increasing prevalence of incredibly complex conditions that are just not explainable by any other model, other than the one that you're talking about. I guess this isn't geeky, this is the future of medicine, the collection of data.

What would you say to the average person who's not sure how they're feeling? They're kind of okay, but they could be better. What would you say to that person?

Evan Brand

I love those cases, because usually before someone reaches out to me, they've already been to ten or twenty doctors, they're very frustrated. They're at the end of their rope. They've already spent 10, 20, 30, 50 thousand dollars on their health, and they're still suffering, and they're miserable, and they're kind of like, "Hey, if you don't save me, my life is over" kind of thing. That's a lot of pressure on me, it's a heavy load.

I love the person you're describing, the person that says, "Hey, I'm doing okay. I can hold a steady job, my sex life is decent, the marriage is decent. My kids seem pretty healthy. But I just want to take a look".

I actually put one of those exact cases you're describing in my *Better Belly* course. It's my flagship online course where I teach people how to read your own lab test, and then I show you case studies and show you how you can actually fix yourself. What supplement for this? How do you fix that? I have a whole section that was called 'I feel fine, but I want to take a look'. It was something along those lines.

This was a woman in her 40s who she's like, "Hey, I'm actually like, I'm okay, I think. But let me take a look". And luckily, she did. She spent maybe \$1,500 to do a good workup. And we found all sorts of things. Let's just use easy numbers. On a scale of 1-10, 10 is you feel your best, she thought she was an 8. Pretty good, but maybe a little room for improvement. But after we found all the issues and we fixed them, she goes, "Oh, my God. I didn't realize I was probably at a 4/10. Now I'm at an 8, and I want more".

[00:41:33]

I think most of us, we adapt to our level of disability. For example, if you're someone who goes up a flight of stairs and you get winded easily, you get to the top of the stairs, and you're catching your breath, you may just adapt to that. And you're just like, "That's just me, I'm just out of shape", and you just blow it off. Or you may think by 2-3PM you need that second cup of coffee. You're like, "It's fine. Everybody's tired in the afternoon. No big deal". Or you can't keep your eyes open past 8PM at night. And you're just like, "Oh, yeah, everybody's tired".

It's so easy to just blow all this stuff off. Like, "Well, everybody's tired. Everybody has allergies. Everybody's grumpy. Everybody's this." But then when you start to look at it and you see it on paper, and then I can explain to you, the reason you're crashing 2/3PM, you're reaching for the organic gluten-free cookie is because your cortisol just took a nosedive, and now you're critically low battery at 2PM. If we can use specific adaptogenic herbs to help support what's called the HPA axis, and then we can raise and boost cortisol back to normal levels. You don't have a 3PM crash anymore. You can go till 4, 5, 6, 7, 8, 9 before you start getting tired.

It's really fun to take someone who thinks they're good, show them what's wrong, and then you've given them an extra 20% of improvement. Now this all sounds kind of me, me, me right? It sounds maybe selfish and egocentric in a way. Because you and I are speaking to the individual people.

But I want to highlight that this changes society because if you're a more energetic mom, your kids are going to get the better version of you. So they're going to have better memories of their mom, not the version of her that was so tired she was on the couch just watching tv. They're going to remember the mom who had enough energy to play with them. If you're the grandparent, you're going to have the memories and the grandchildren will grow up and go, "I remember my grandparents playing with me. We played ball, we played out in the street, we rode bikes together".

If you're an entrepreneur or business owner, you're a doctor, you're a practitioner of some kind, you want your patients to remember you as the coach, the doctor, the practitioner who had enough energy to give and had enough juice to help heal people, as opposed to, "Yeah, he was grumpy and tired and he gave me no good help".

I want to be the guy who people remember because I gave, gave, gave. But if you don't have that in you, you can't put it out. So I encourage people not to think of this as a selfish pursuit. I would encourage you to think about how you can plant your seeds of goodness out in the world if you feel good enough to do so.

If you want to volunteer at an animal shelter because you love dogs and you want to help out the animal shelter, but you're too tired to do it, then you've got no further than the idea. If you want to be a substitute teacher because you used to be a teacher and now you're too tired to do it, what if we get you enough energy now you can go help them and put a greater impact on the youth.

So I encourage people to look at how this thing spreads. This whole spider web of health really helps other people. Don't think about it just in the selfish way.

Think about, if I'm a more energetic husband at the end of my workday, I'm not just going to crash on the couch. I'm actually going to come home and have enough energy to help my wife. And I've

been begging her because our intimacy is lacking. And I think that she's supposed to do all the chores and keep up with all the kids, ain't have enough mojo left for me. Well, now if I have enough energy and I can help her, and I do all the dishes and I do all the laundry, hey, maybe she's got a little reserve left in the tank for me now. It's cool to think about how improving yourself could improve others.

[00:45:35] Dr Anu Arasu

Yeah. It highlights the interconnectedness of everything. That's one of the strong feelings I've had listening to you. In a way, we've been made to numb out because we've so often been told by our current model, "Treat the patient, not the numbers. Don't look at the data". And okay, maybe years ago that had a certain practicality to it, but now we're in this stage where there are so many weird and wonderful conditions coming up and people are jumping from, "You're fine, you're fine, you're fine, your numbers are normal" to, "Oh, yeah, you've got this immune or neurodegenerative disease from nowhere".

I suppose what you're showing people, what you're showing people at every stage is a pathway, is a gateway into their health. What would you say is the culture change that needs to happen in our heads?

Evan Brand

I think it's happening now. I think we're in a big wake up right now. I tell this to clients all the time, which is that, especially to the stubborn spouse. Usually it's men that are the problem. Women are much more open about their suffering and their misery, and they're more open to say, "Hey, I need help". I find it's probably like an 80/20 split for my practice, 80% female, 20% male, so that shows you.

It's not that the men aren't suffering. They are, I can tell you, maybe more in some cases, because now they're taking on the load of seeing their wife sick. Now they're stressed, because now they're seeing her suffer. And they say, "Happy wife, happy life", right? If she's down, he's probably down, too. But maybe they're less willing to ask or accept help.

When I was at that birthday party yesterday. We were talking to another one of the moms, and she's all in on all this. She loves all this, she's like, "Hey, I follow your Instagram page now. I'm watching your videos. I'm learning everything you're teaching. This is great. Please help my husband get on board."

When you ask about the culture change needed to take place, people have to get miserable enough to listen. If it's easy for you to just pound an extra cup of coffee or, I saw another dad at the party yesterday. He was drinking an energy drink. Just a big old pink bottle just loaded with artificial flavor and sugar and all sorts of garbage. And I'm like, "How do you like that?" And he's like, "Oh, I love them. I drink them every day". I'm like, God. This guy, he's just getting along just by doing these energy drinks every day. How sustainable is that going to be?

Unfortunately, you and I can't fix everyone. But I hope that this message to them is that, don't wait until you're at rock bottom to want to change. It's harder for me, too, and any practitioner you see. If you're waiting until you're just absolutely miserable and you feel like you're either going to take

your life, or go crazy, or get a divorce, and now you want to get help, you should have probably reached out like five years ago.

[00:48:35]

Sometimes that happens. I've been doing my podcast for over a decade, and sometimes clients reach out and they say, "Hey, I was listening to you for five years before I reached out." Why did you wait five years? You could have been done. You would have been off the ride by now. You would have been healed by now if we would have done this earlier.

I think what's happening is good, but we need to speed it up, which is people need to recognize they don't feel well. The problem is most people, when they do recognize they don't feel well, they don't know where to go. So get these labs. Organic acids testing is widely available. I have clients all around the world, we have international distributors.

If your practitioner doesn't know about it, you could reach out to somebody like me that does, that looks at thousands of these a year. Get the organic acid so you can look at your brain, you can look at your gut, you can look at your nutrient levels. We can fix what we can find, but we can't fix what we can't find.

So 'Test, don't guess' with your health. You're buying random supplements. You heard here, you heard there, you saw it there. You have a supplement graveyard now of stuff that you don't even know if it's really helping. You're going to save money and time if you just get the data.

Dr Anu Arasu

What I'm hearing here, and I guess the heart and soul of this conference, is that there's a huge piece around education that actually there is so much for people to understand and know, and then that opens doors, because what you were saying is that although this stuff is unavoidable, it is fixable, and you get great results, people get better.

Evan Brand

Yeah, I had a podcast just about a month ago with a mother of a child who came to me who was nonverbal. He was diagnosed nonverbal, autistic. Zero words. Zero. Within a few months, this kid is speaking over 200 words. That is incredible. You think about the statistics on that, that's a whole other rabbit hole that we could spend an hour on.

When you look at the youth and you look at the statistics now, autism, for example, was 1:10,000. Now it's 1:30, 1:15 in certain places in the US, depending on where you look. Some just blow that off, too. They say we're just getting better at diagnosing it. We're just getting better at recognizing it, we just have increased awareness. Maybe. But when a kid is 3, 4, 5, 6 and can't speak, that's an issue.

How will society continue to function as we age, if all of the youth have neurodevelopmental issues? They can't talk, they can't perform as well. They're weaker, the average man's hand strength, significantly less. Read up on that. That's interesting, too. Have you ever shook an old man's hand? 70, 80, 90-year-old man. They're strong. Their hands, you go to shake their hand,

they're stronger than me. It's like, wow! They grew up where everything was organic. There weren't chemicals in the 1940s when they were growing up and eating right.

[00:51:26]

I think about these kids. How does society continue on at the current trajectory? It's a mess. So test your kids, too, while you're at it.

Dr Anu Arasu

That's such a great point, isn't it, about this argument of we're just getting better at diagnosing it? Because that doesn't necessarily help the person in front of you that's having symptoms. It doesn't necessarily make their life better to know that you've just changed your semantics. Obviously, if they're having symptoms, there's something up.

Evan, what I love about today is that you've given us this lens as hormone imbalances being a way into just a real, whole health overhaul.

Evan Brand

That's right. The hormone issues are probably just the tip of the iceberg, right? Because you think about, okay, maybe my hair is not too good. My skin, my sleep, my energy. I have bloating. I have PMS. Right? That's just what you see on the surface.

But when you really start to dig and you find five different strains of bacteria wrecking your glucuronidation, you find five different types of mold toxin affecting your hormones in your brain, and your gut barrier and your blood-brain barrier. You find 20 different pesticides and chemicals that are affecting you. You find heavy metals that are affecting you. You find nutrient deficiencies that are affecting you.

It's amazing. This is very empowering stuff. If you feel down and you feel hopeless, and you feel like you're on an island and nobody understands you, trust me, you're not alone. Your issues are not rare. Your next door neighbor, if you knocked on their door and asked them, they probably have some of the same stuff wrong with them, as well.

As you know, with your profession as well. You get really good at studying people and reading people. When I look around, it's like I almost want to put blinders on, because even in where I live, it's generally a little more healthy. People are a little more active. They're trying to take care of their health. Everywhere I look, though, I still see people with dark circles under their eyes. I see people with issues, with their skin, rashes, discoloration, hair problems. It's hard for me to ignore that.

I almost want to run up to everyone and just pass out a stool test to them. Like, "Hey, I noticed you've got your skin quality doesn't look very good. Let's see what's going on in your gut. Call me in a few weeks when we get the results". But I'm only one guy, so I'm doing my best.

[00:54:03] Dr Anu Arasu

There's also this other aspect that we see all these people who are wanting to live their best lives and increase their vibration and live their potential. What would you say to that? How does this stuff help one do that?

Evan Brand

I love that branch of people, that they're going to raise their vibration, they're going to meditate, they're going to get to this new level of manifestation, and they're going to wish all these things into existence. The mind is powerful. I'm just going to manifest these things. I'm going to play with my oracle cards, and I'm going to do all these magical healing tools and modalities. I'm going to do more yoga, and I'm going to use my crystals, and I'm going to wear this EMF protection bracelet.

Cool. But none of that's going to get the mycotoxins out of your body. None of that's going to treat the bacterial overgrowth. That's 10-1000x higher than normal. None of that is going to remove the pesticides and chemicals from the body. I love this idea, there's a whole field of medicine about this. They call it psychoneuroimmunology, which is basically how the brain can impact the immune system, for example. I love this stuff.

I love trying to do affirmations and positive thinking and emotional freedom and trauma clearing and trauma work. This stuff is all awesome, go for it. But there is a limit, in my opinion, just based on what I've seen, those people that are doing all that, there's still biochemical issues under the hood. We're still humans. We're still a flesh vehicle that can have and store toxins in it.

I just don't know if you can meditate and manifest and heal your way out of it without intervening from a biochemical perspective. Meaning putting in a binder like charcoal and zeolite to grab onto these toxins and then pull them out through the stool. Or we're giving medicinal mushrooms to help improve kidney function so we can more effectively filter the blood. Or we're giving herbs to suppress the pathogenic bacteria and parasites. At a certain point, the quantum healing, the thought healing, I think there's got to be an eventual time where you consider bringing in these other tools.

Dr Anu Arasu

Beautiful. Evan, this has been so enlightening. Thank you so much for coming on to speak to us today.

Evan Brand

It's my pleasure. And like I said, I have a [podcast](#), so if you want to hear more like this, I've done 500+ interviews. The show has been out for over a decade now. It's all free.

If you want to learn how to take your health into your own hands, learn some of this stuff, I do some free master classes. I do sell more professional courses where you can take quizzes and look at people that were messed up and how we fixed them. So www.EvanBrand.com that's my site. It has everything there.

[00:57:00] Dr Anu Arasu

And your podcast is [The Evan Brand Show](#), is that correct?

Evan Brand

That's right.

Dr Anu Arasu

Fantastic. Anywhere else that people should look for you except for the website and the podcast?

Evan Brand

That's probably the best place. I do [YouTube](#) videos, I do some [Instagram](#) videos. Some of the stuff I want to say, I can't say though. I would just follow me on the website because you've got the most freedom there.

Dr Anu Arasu

Thank you so much.

Evan Brand

Thank you.