



THE

FATIGUE

SUPER

CONFERENCE

## **Why stress ruins sleep and how to fix it**

Guest: Evan Brand

**Alex:** Welcome to The Fatigue Super Conference and for this conversation I'm talking with Evan Brand. Evan is a podcast host, certified functional medicine practitioner and nutritional therapist. He is passionate about healing chronic fatigue, obesity, the depression epidemics, after solving his own IBS and depression issues. He uses at home lab testing and customized supplement programmes to find and fix the root cause of a wide range of health symptoms. His Evan Brand podcast has over 7 million downloads and counting and he's the author of 'Stress Solutions: RE Rehab and The Everything Guide to Nutropics'. Evan thanks so much for being here.

**Evan:** Alex thanks for having me.

**Alex:** So we're going to have a bit of a conversation about sleep and the role that sleep plays in fatigue. So before we come in to some of the different facets and pieces to do with this, maybe let's open up a little bit about on one hand people might say it's obvious but I think there's more to it than just the obvious, why is sleep so important in really pretty much any kind of fatigue people can be experiencing?

**Evan:** The hardest part about this question is that everyone who has health symptoms, they can't sleep. The most chronically exhausted people you would think these chronic fatigue people can sleep, they still can't sleep and there's an underlying issue preventing them from sleeping and there are several different processes that happen during sleep which help maintain our sanity during the day.

One is helping to regulate our hormones, we have an opposing cortisol/melatonin rhythm and that gets disrupted and so melatonin is supposed to peak in the evening and cortisol is supposed to be at its lowest point and in the morning hopefully at 6am/7am you wake up and you get lots of bright light, like I do I've got tons of windows in my house, you got the blinds open cortisol is supposed to go to its highest point and melatonin production shuts off. Often in chronic fatigue we have what we call an inverse

cortisol rhythm where we're seeing a spike of cortisol in the evening and guess what cortisol does, it takes that seesaw and it imbalances it, so when you have high cortisol you have low melatonin. When you have high melatonin you should have low cortisol and these things get flip flopped and that's when people get destroyed.

There's another system called the glymphatic system, which is a g like 'Gary', and this is how we detoxify our brains and this system only works while you're sleeping. So this is why so many people with chronic fatigue and chronic illness in general become more sick because if they're not sleeping due to a cortisol imbalance potentially related to hypoglycemia or blood sugar problems, related to infections in the gut that's disturbing their cortisol rhythm like they've got a parasite that's releasing endotoxin into the system and that's cranking up cortisol. Regardless of what the root cause is underneath it if that glymphatic system is not working properly toxic people become more toxic.

**Alex:** I think one of the challenges, you mentioned it in terms of the hormone imbalance, one of the challenges that can happen with fatigue is that people feel tired all day and then suddenly it gets to the evening and suddenly they perk up and I know extreme cases of that where literally the only time they feel they have any kind of brain function is from 10 o'clock at night to 3 o'clock in the morning. So they end up in this completely skewed kind of rhythm and that just has a massive impact on someone's ability to actually heal and recover.

**Evan:** Yeah it's not sustainable at all. For one thing I used to work third shift to pay for my college, I was working from midnight to 5am, it was about the worst thing you can do. The World Health Organisation now says that nightshift, which is what I would consider what you're discussing, nightshift is a carcinogen, it causes cancer. Why does it cause cancer well it's simple, melatonin. It's the most powerful antioxidant known to man and we can manufacture melatonin, we don't have to take it in supplement form. Like when I say melatonin people don't think of their body they think of a supplement, no we're talking about your body making it. But if you're up at like 10 o'clock like you're talking about or you're up like me a midnight working under florescent lighting guess what's happening, you're shutting off all your melatonin production and you're going to end up with cancer. So this is why if you want to live a long time and be healthy you cannot work night shift, you can't do it. Even swing shift is terrible or sometimes, I don't know what you call it over there but in the States we call it swing shift, where you work a nightshift and then you work a day shift and then you're back to a night shift. A lot of people ironically in the health care industry, a lot of

doctors and nurses and stuff do this, which I the stupidest thing we could ever do.

Now am I saying close the hospital's, you can't get help everybody's sleeping, no that's not realistic somebodies got to do it but hopefully it's no longer survival of the fittest on the planet it's survival of the smartest. So if you're smart enough to know that's stupid to work night shift and you can choose to opt out of it do day shift. Now don't yell at me, the two people out there like **Evan** I can't keep my job unless I do night shift, look I understand but be looking at other options because night shift destroyed my life, it destroyed my gut, it destroyed my adrenal rhythm, it destroyed my sleep, it destroyed my moods. Part of me recovering from anxiety and depression and all sorts of problems was just getting off the night shift, I mean it is so critical, critical, critical, to sleep when the sun goes down and wake when the sun comes up, just like our ancestors did for the last hundred thousand years.

**Alex:** And then to bring this into the more severe end of the fatigue spectrum one of the other things that often happens is that people feel tired but wired, so they feel exhausted much of the time but there's this on button that's still there in their nervous system. So when it then comes to sleep often they'll struggle to get to sleep or if they can get to sleep they'll then struggle to stay asleep or get quality of sleep.

Well let's come into some of the things we can start to do about this. You mentioned, for example, getting daylight and being in rhythm with nature. So talk a bit about why that is so important and perhaps how that's related to the hormone production you've been talking about.

**Evan:** I like where you were going, I'm going to take this a step further, I'll get to that question and maybe I'll have you re-ask it to be in a second, but I like where you were going at first before you changed your mind.

**Alex:** (laughs) You noticed what happened there.

**Evan:** I did, I did notice. I do thousands of interviews so I can pick up on little subtle changes but I liked the rabbit hole you were going down so what I'd like to say is that the brain is responsible for a lot of what's going on here. We've got the limbic system which is sort of our ancient wiring system that includes the amygdala which is the fear centre of the brain and so many people, especially when we talk about people that have been exposed to trauma, you know we see a huge overlap between trauma and chronic fatigue or Lyme disease, or sexual abuse, or alcoholism or drug abuse.

You know so there's so many overlapping things between all these issues that they sort of just coincide and you had sparked this thought in me to talk about the limbic system and the fact that when we see veterans, for example, that have been fighting overseas in Afghanistan or somewhere else, we often find these people have chronic fatigue and often have sleep issues as well and it's related to their amygdala, which is pretty much centrally located in the brain. We've done functional MRI studies on people, not me I don't do MRI's but we as science, has done functional MRI studies on people and what we've determined is when you're exposed to a trauma, whether that's like you got beat up, you were in war loud explosions etc., what it does is it actually increases the size and the sensitivity of the amygdala so now at the drop of a hat your amygdala thinks you are getting chased by a bear even though it's just the email notification on your stupid computer going ding, new email. Your brain doesn't know the difference between that and a real threat so what happens is the sympathetic nervous system turns on and that sympathetic nervous system is fuelled by hormones like adrenalin and cortisol. So the main thing when we're trying to fix someone's circadian rhythm is we've got to get rid of all the sympathetic stressors, everything that you're up against. Whether it's a timeline, a bad boss, a bad spouse, a bad babysitter, you've got unrelenting emotional stress, you hate yourself, you think you're too fat and lazy or whatever so you're negative, you're beating yourself up. You don't like where you live, you're home sick, you've got chronic viral infections, you've got parasites, you've got bacterial overgrowth, you've got candida, you're not eating organic so you getting tons of glyphosate which is destroying your mitochondrial membrane.

So you add all that stuff up, those are all sympathetic stressors that didn't exist. I mean you and I go back a hundred thousand years ago and we're sitting on a cliff together, we're not stressed. We may be stressed because we haven't gotten a kill in a few days and you and I are going to try and go hunt something and make sure we can provide for our wives and our children, but we didn't have 24/7 unrelenting stress like we do today. So our nervous system never really gets a chance to shut off and I don't think it's a matter of IF society collapses at this point, I think it's WHEN is society going to collapse from all this. On a global scale, I world with clients everywhere around the world and I'll tell you this is not a European phenomenon, this is not an American phenomenon, this is in every part of the globe, this unrelenting stress.

So the people who are not having any health issues now, that doesn't mean they won't have health issues in the future. I think people like me, and other people listening who've dealt with chronic illness themselves, I think we are the canaries in the coalmine. If people don't understand what that means, where I am in Kentucky in the United States we have a lot of coal mining in

the Eastern part of the state and you take the Canary, which is a bird, into the coalmine and they're more sensitive to environmental changes inside it and so when the mine becomes toxic and the air is too bad in there the bird dies. When the Canary dies everyone else realizes we've got to get out of here, we've got to make a change.

So right now with all the people listening that are suffering they are the Canaries and once they die that's the wake up call to the rest of humanity that we have to make a change and so I think the only way to create a sustainable future, whether you're talking about sleep or the biggest issue is stress. That's what we're talking about here, we're talking about stress impairing sleep, that is the root cause of everything. But stress could be anything from the chemical I talked about to the emotional to the physical and so the only way to truly fix the sleep is to fix the stress, which is why my first two books were on number one sleep and number two stress.

So what you have to do is be selective, you've got to be selective with who do you spend your time with, when you go hang out with someone and you go for coffee does that person energise you or do they exhaust you? Do they just gossip and talk about other people the whole time or do they talk about big things that expand your mind and help you to feel better? Your family members, when you spend time with your family and you leave their house do you feel happy and like man that was such an enjoyable visit with so and so or do you leave the house and go wow that was miserable and then you sit in silence on the car ride home with your wife. You know if you're finding that you're being drained by people in your environment you have to get rid of those people. It doesn't matter if these are the people closest to you, I've suffered so much in my own life that I had to systematically one by one pick and choose the people who can remain in my life who are those that fulfill me and those that elevate my cup, not those that drain my cup.

I tell you it takes a combination of balls and wit and there is some pain and suffering with eliminating people from your life. I had a woman with chronic fatigue, she couldn't lose any weight, that was her main thing it was chronic fatigue and weight, and we talked and talked and went through all these protocols together and I said you know what I've done everything that works for everyone else, I've fixed your gut infection, we've fixed your candida, we've fixed your Epstein Barr Virus, your now testing like it's not an active viral infection anymore, I don't know why you're not losing this weight. Is there anything else that you're not telling me? She says well I think I need a divorce but I don't want to do it because I have two kids together with my husband and he's a good dad and everything but we're just not meant to be together. We fight all the time, he's always out of town, we're just not meant to be together anymore and I don't know what to do. I said if you want to heal from

this chronic fatigue and if you want to get these last 20lbs off, you got to get rid of him, and that was the last consultation we had.

**Alex:** (laughs) She got rid of you rather than him.

**Evan:** No but check this out, no she didn't actually so there's a follow up to this. This was actually when I was still doing in person consultations, now I'm just strictly virtual just because I'm too busy to have an in person clinic with people like that. We actually scheduled like a walk and talk consult, I said well I'm really booked up with clients but I am going to the park, I'm going to go for a hike, if you want to join me on the hike you can join me and we'll do a walk and talk consultation. So we go on a hike together and I barely recognised her, she had lost like 25-30lbs and I was like you look fricken amazing, what did you do, she goes I got rid of my husband. I'm like wow, I said did you change anything else like diet, sleep, supplements, like you had to do something else. Nope I didn't do anything else I just got rid of the husband, we're done, I'm like wow.

So here we are in functional medicine talking about lab testing and parasites and all these advanced protocols yet we still don't fully understand in the real of science how something like an emotional stressor, the emotional baggage of someone in our life that doesn't belong, and how that affects our health. I said well what about your fatigue, she said what fatigue, I hike five miles everyday now, I'm like what! I mean you go talk to an endocrinologist and you tell the endocrinologist that you had chronic fatigue and now you can hike five miles and all you did was get rid of the husband they have no answer, they don't know how to explain that. I don't know how to explain that either I just think it's amazing.

**Alex:** I think one of the things that's also fascinating is when people are suffering from chronic fatigue in its various kind of forms things that weren't stressful before also then start to become stressful because ones resources and capacity to meet their life also becomes diminished.

So in a situation like that it may be that when she was well she had the kind of resilience and she was compensating, there was a kind of efforting that was going in to that, that she could just about sustain but then also what starts to happen is I think people's capacity to tolerate bullshit, people's capacity to handle their own helper patterns, their own kind of pushing themselves beyond their limits, as their capacity for energy goes down their sensitivity goes up and it can actually be quite a powerful way of highlighting things that we otherwise wouldn't see as being issues in our life. It's like we have to become more ferocious and ruthless in terms of how we audit and deal with the things in our life which aren't working.

**Evan:** That's beautiful, that's never been explained to me that way before ever and I'm so glad we're having this conversation today because that makes perfect sense in my head. I didn't explain it the way you explained it sounds so much more intelligent than the way I explained it. I'm very simple with it, I just say you know what if your stress buckets full that extra little stress of that person overfills your bucket and you get a manifestation of symptoms.

The way you said it was beautiful, that it is the increased sensitivity and that actually reduced the tolerance for the stressor, that's eloquent, so I'm going to steal that from you and use that.

**Alex:** (laughs) You're most welcome. I want to come back to the question that we kind of dived away from around the role of hormones and light because I think one of the things that people can very easily get caught in is thinking that the solution must be some kind of complex intricate psychological process or some supplement or some changing diet which is radical without realising the importance of circadian rhythm, of having enough daylight, and you touched on that earlier.

So let's just open that up a little bit more and just say a bit about how that can play a role in shifting someone's hormones and therefore their sleep?

**Evan:** Sure. Yeah so here's the hard thing too is that like with the chronic fatigue we're often seeing that this is really linked to mold and mycotoxins and so when you're exposed to mold what it does is it actually messes up your nitro oxide production and it will actually reduce the blood flow to the optic nerve and so this is why a lot of people, including myself, with mold issues have blurry vision or red eyes or any type of vision disturbances, maybe floaters in their vision etc. They go to the eye doctor and the eye doctor can't find anything wrong and so when we talk about the eyes that is really the portal to everything.

When you control your hormones with your eyes you sound like you're a character from a movie but it's true. With these suprachiasmatic nucleus, it's called the SCN for short, you're getting the signal from daylight, when you first wake up and light spectrum changes to be more blue, the blue light from the morning comes in, hits the suprachiasmatic nucleus, goes past optic nerve, etc. that then triggers a hormonal response from the brain. You've got this whole HPA, the hypothalamus talks to the pituitary, talks to the adrenals, which then talks to the thyroid and says hey it's time to wake up lets make hormones. So you're going to start to make cortisol, you're going to be elevating thyroid hormone, the whole systems going to get working. It's like you threw the water in and the steam engine is starting to fire up and start churning.

The problem is most people wear sunglasses all the time and sunglasses, like for example Ray-bans a very common brand, they use an 18% lens. What that means is you're blocking, you take a 100-18, is what 82%, so you're blocking 82% of sunlight from entering your eye. So imagine that you've got a diverter, you've got a big bucket here and out of this bucket you've got a little valve and you can control this bucket, you're going to control the amount of sunlight that can get into that bucket and shift downstream to fuel everything else. You've got like a sun powered boat, like a solar powered boat, that's going to fly down the river if you can get it enough light. Now you've taken this bucket and you've closed off 82% of that and now only 18% of that sunlight can get in.

So now your solar panels are barely getting hit with a spec of sunshine and you're wondering why your boats not going anywhere and so the hard part is people with adrenal fatigue and people with mold sensitivity they often have light sensitivity. I've noticed that personally since I got exposed to mold, I've noticed my eyes are more sensitive to light and there are certain situations like driving a vehicle that I do feel like I have to wear sunglasses because the glare of the oncoming traffic does irritate me a bit.

But you want to try to avoid that, if at all possible, minimize and avoid wearing sunglasses, use a baseball hat or use a big sun hat or something because you need that signal. That is a communication from the sun, 93 million miles away, through the layers of the atmosphere to then hit your retinas and so if you're blocking that signal you're telling the brain that it's not daytime. Your body, your brain never gets the signal that it's daytime so why make hormones because you're brains thinking it's like evening, you know. You're getting 18% of the daylight in now it's like your brain thinks it's a constant 9pm at night, why make cortisol, we don't need to make cortisol.

**Alex:** And of course one of the things that can happen is then the most light that somebody gets into their eyes is when they start looking at a big bright TV screen, particularly these days of 60 inch TV's, but actually that's the most light they get and that's why people, one of the reasons why, people can become so stimulated in the evening.

So maybe say a bit also you mentioned about the importance of getting sunlight in the morning as a way of reminding the system to wake up, about kind of sleep hygiene in the evening and things like bed time, things that are do's and don't as it's time to wind the system down and start producing melatonin.



**Evan:** Yeah and this is not just theory I mean I've looked at over a thousand salivary hormone panels and I can show you on a piece of paper what it looks like when you have someone who starts a 9 o'clock television show at night, you know we'll see the morning's cortisol is high like it should be, the cortisol drops out, the cortisol drops out, then all of a sudden at 9pm or 10pm when they do their final salivary hormone panel all of a sudden the cortisol's spiked up to the level that it almost was in the morning. I will say OK what did you do at 10pm and she goes oh that's when I watched Game of Thrones or that's when I watched whatever, and it's some TV show where there's murder and rapes and killings and guns and police sirens.

**Alex:** Hopefully some sex as well sorry just to be crude.

**Evan:** Yeah probably some sex as well and that's all happening at the same time that they're getting blasted with blue light and what does blue light do, well it tells the brain that it is daytime wake up make cortisol, and so people will say Oh well I wear blue blocking glasses at night, I'm blocking the blue light. It's like yeah but your skin receptors are still picking up on the blue light so I mean if you're covered in like a long sleeve clothing and you have blue blockers on maybe that's OK but even then you still have the stimulation factor of someone getting shot with a machine gun at 10pm and your brain is watching what.

Your brain doesn't know the difference, you know the difference between reality and not reality, but your nervous system doesn't. When your nervous system hears a gunshot it's a gunshot, I don't care if it's on the TV or not, you're going to get a little spurt of adrenalin. That's why people watch these things because it stimulates us. You know I had some clients who they would tell me Evan I can't get out of bed in the morning unless I do one of three things, one drink coffee, two listen to really loud music, or three watch something like really scary or something that makes you angry or something that's really exciting like a Nascar race where all these cars oiled up and their catching on fire and people are burning. People tell me they literally have to seek out something stimulating enough to whip their tired adrenals to get them out of bed.

So I'm not saying don't enjoy life, I'm not saying don't watch TV, but if you're someone whose suffering you've got to be really careful about when you structure these things. Do that in the middle of the day, at 10pm you should be closing your eyes, your bedroom should be for sleep and sex only, you shouldn't have a TV in there, you shouldn't have tablets, you shouldn't have a laptop, you shouldn't be charging your phone in your bedroom. Your bedroom should be your one place where the world just goes away and disappears. Don't bring the outside world into your bedroom, don't be scrolling on your

phone, reading all the terrible news of the day while you're cuddling with your wife as she scrolls on her phone in bed.

**Alex:** (laughs) The romance.

**Evan:** Don't do that.

**Alex:** You mentioned about blue blocking glasses and this is a kind of interesting one because I remember when I first came across them I just couldn't work out why a bunch of people that I was watching interviews with were wearing these kind of orange glasses and I was like is this some new Californian fashion trend that I just haven't really got my head around.

So I suppose using it in the wrong way you described, it's a little bit like someone going out having a massive part with loads of alcohol and cocaine and everything else and then the next morning doing a coffee enema and a fast and going well it's OK because I've balanced it out.

So you are saying it's not just a case of wear blue blocking glasses and then you can do whatever you want to do in terms of stimulation and screens, but they can play a role I think so maybe say a bit about what they are and why they can be helpful.

**Evan:** Yeah they can help. So you can buy some ranging from \$8 to \$100 designer blue blocker glasses. I carry a company, they special order glasses for me so we actually work with an optician lab so we get professional lenses, because there's a lot of cheap crap on the market and they still do the same thing but if I'm going to wear blue blockers I want the quality of the optics to be really good so you can still have the visual clarity to read your phone or whatever you need to do at night.

So for me I've got some fancier ones but they were worth the cost and so what they do, depending on what company, see there's a lot of claims out there. Companies say well we block this spectrum, you've got the visual colour spectrum, it's in nanometers, the light ranges and so I want to say the blue light is anywhere between four 400 – 590 nanometers or something like that, it's a wavelength of light. So certain glasses will block some of the blue spectrum but not all and you want the glasses that block all the blue spectrum because that blue is what gets removed when the sun goes down. So when the sun is setting and the sky is turning orange and red and all these beautiful colours in the evening you're not really witnessing the sky turning red and orange you're really witnessing the blue be sucked out of the atmosphere because the blue light can only come through the atmosphere of the planet when the sun is at a certain angle so when the sun hits a certain

angle the layer of the atmosphere actually filter out the blue light and so what light comes in are the reds and the oranges and everything else, those are at a different colour spectrum.

So really we're just trying to replicate what the atmosphere does from outer space anyway and so what that's going to do, hopefully, is it's going to prevent the artificial manmade blue light that we create on our TV's and tablets and phones, that's not natural, you're not supposed to have blue light at 9pm. That didn't exist even 50 years ago, my grandfather when he grew up had a little black and white TV so blue didn't even exist like it does now, now every charging light and everywhere you look there's LED's in your face. So we're trying to replicate a pre electricity optical environment so that the brain can get the signal the blue light is gone, let's make melatonin, that's all it is. That's the whole simple goal of what it does and why it does it.

**Alex:** That was very well explained thank you, I learnt a few things myself there.

How important do you think bedtime is, like you know we're talking about the importance of getting light in the morning, getting the right sort of light and calming the system in the evening not watching TV, but how important is the actual time and being in sync with actually the kind of rhythms outside?

**Evan:** Oh it's huge. There are studies on this, you can actually talk to some of my friends I've got several friends that are cardiologists and they'll actually backup the studies I've read where we see like a 25% increase in heart attacks and strokes when we change the time. There's people talking about abolishing the whole daylight savings time where you'll go an hour backwards in the fall you go an hour forwards in the spring and your circadian rhythms been stuck on this 8 o'clock/9 o'clock/ 10 o'clock rhythm and now all of a sudden the 10 o'clock becomes 9 or the 9 o'clock becomes 10 and emergency rooms have a higher spike in heart related issues on those days because of how big of a stress it is.

You know time is a human construct anyway and let a lone a calendar and a clock, I mean when we sprung forward here I'm used to eating dinner at 6 o'clock so then we spring forward so I would look at the at the time and my body knows hey I'm hungry right now, I want to eat right now and then I'm sleepy now, I want to go to bed right now, which I ended up wanting to go to bed about 8.30 because I was used to going to bed at 9.30 or vice versa. You know what I'm saying, when you push it forward I used to go to bed at 9.30, 9.30 becomes 10.30 so then I'm going to be at 8.30 to make it 9.30. I think people understand what I'm saying.

But my body knew the trick, my bodies like wait a second just because the numbers on this smart phones changed and it says it's an hour later my circadian rhythm still knew it's time to eat here, I feel hungry now, I feel sleepy now, so people don't listen to these signals of their body. Anyway a bit of a tangent about daylight savings time but you want to keep a consistent bedtime because there's studies on this, I'm not making any of this up you can just Google cortisol circadian rhythm like week in sleeping. What you'll find is that if you go to bed at 10 o'clock every night, which is my optimum goal for people and that means closing your eyes at 10 that doesn't mean getting on your phone in your bed and scrolling on Instagram, that means closing your eyes at 10.

If you do that on the weekdays but then on the weekends you stay up till midnight your circadian rhythm is going to get thrown off for two to three days. So if you like stay up till midnight on Sunday because you don't want to go back to work on Monday, you're going to be screwed up until at least Wednesday before your circadian rhythm gets back in check. So then Wednesday you go to bed at 10, Thursday and Friday 10, oh Friday night I'm partying you're staying up till midnight. OK well you just screwed up what you were fixing during the workweek.

So no matter what day of the week it is I try to go to bed at the same time, 9.30/10pm at the latest. That's been a critical component of my healing because if I do try to push that bed time back, you know if I'm just wanting to read a book or hang out with my wife and spend a bit of time after the babies gone to sleep and we'll stay up a little later, if I go to bed at 10.30pm I'll feel it the next morning. I'll know man I stayed up later last night, even if it was 30 minutes my body keeps the score, it's like nope Evan you can't get away with that. So it's like you've got to charge your batteries at the same time, if you plug in your car every night at 10 o'clock you want to go to bed every night at 10 o'clock, same thing.

**Alex:** And I think a lot of this it takes discipline and I think it takes experimentation, right, because my observation is different people have different sensitivities. So some people can be really sensitive around food and much less sensitive around, for example, blue light in the evenings. Others are super sensitive to chemicals, others are totally fine with chemicals but if you mess with their bedtime they're just like a monster.

So part of it I guess is that kind of exploration and discovery of what's important and of course there are those that are sensitive to everything and that means more diligence and learning to cultivate positive habits becomes all the more important.

**Evan:** Yeah you make a great point, you know people may listen to me and say god Evan is just like anal about everything and it's not out of me wanting to be anal about everything, it's that I had to. For me to recover my health I had to, I had already fixed the diet I had already gotten rid of gluten and dairy, I had already quit skipping meals and balanced my blood sugar, I got rid of processed foods, I got rid of the sugars and refined carbohydrates. You know I had already done all the low hanging fruit that you read about and hear about on the internet so then I had to fix the sleep and then I had to fix my schedule and then I had to fix my gut, then I had to fix my mitochondria, then I had to fix my mycotoxin and chemical exposure, then I had to help out my liver and my gallbladder.

So I've just been systematically checking each box off the list so I'm not saying that if you go to bed at 10pm all your problems are magically going to be better, no that's just one more thing that you need to do. Think of your ancestors, they're not watching TV at 10 o'clock, what were they doing, well it depending on the environment they were probably either having sex or sleeping or hanging out by the fire. Yes did our ancestors get up in the middle of the night, yes they did, there has been talk of even the Hoshdar in East Africa, in Tanzania, where they would take shifts to ward off the predators. You know they would wake up to add wood to the fire to keep the fire going to keep the family warm or they would be up at 3am to get rid of the coyotes or get rid of the wolves that were coming into the camp to try to steal the babies or the children or the supplies and the food.

So this idea you have to sleep for an eight hour stretch I don't think is realistic either because if we do look at hunter gatherers we do see that they wake up in the middle in the night too but they don't have light pollution, they don't have smart phones plugged in by their head. My little brother, for example, he sleeps with his iPhone under his pillow, I'm like no every two seconds the cellphone tower is sending the signal to that iPhone are there any new text messages, are there any app updates, are there any new emails, are there any new this and that.

So you can buy an EMF meter and put the EMF meter next to his pillow and I'm sure it's going to be off the charts and he's going to be radiating his brain all night, which guess what EMF does, lowers melatonin. So you know keep the technology out of the bedroom it's just not worth it. If you need an alarm clock well go buy an alarm clock that's like a little cute red one that's powered by a battery or something. Or put your phone on airplane mode but just keep it on the other side of the room because if you're charging it, charging the phone creates dirty electricity and that dirty electricity can disrupt your melatonin as well.

So you really want to be sleeping in a primal environment, which means no electricity, so some people go as far as turning off the breaker to their bedroom. I've had a lot of chronic fatigue clients turn off the breaker to the bedroom to get rid of all the electricity and they do sleep better but some people have like sleep apnea and other machines that have to power so maybe you just run a plug from another room in to use your air purifier or whatever else you need if you have to turn off the bedroom breaker. I personally didn't see too much of a difference when I turned off my breaker but getting rid of Wi-Fi significantly helped my sleep, I use no Wi-Fi at all.

**Alex:** I guess part of the secret here right is that you're experimenting and for some people turning off that electricity breaker may have been an enormous leap forward, as you were saying for some people you know for others not, but turning off the Wi-Fi might be or getting to bed earlier or getting that discipline around bedtime and I think really a lot of what you're saying here is that you need to know key principles of things that could play a role and then to experiment and listen to your body. Sometimes that feedback may be immediate, other times that feedback may be more gradual and take more time.

**Evan:** Yeah. This is why it's important to work with a team, have a practitioner on your side that's helping you through all this. I mean you could just listen to this interview a few times and hopefully Alex and I will help point you in the direction of some of these experiments but you don't want to go out and just buy a supplement for your adrenal glands if you have no idea what the status of your adrenals are. I remember I had a client in Hawaii, she was in her 20's, she was in college, she had such bad chronic fatigue I would have bet a million dollars that her cortisol levels were going to be flat lined, just extremely low, but I thought you know what Evan don't go against your training, don't give this girl herbs to raise her cortisol right now. Let's get the data, get the data and so it delayed I bit because she was in Hawaii so we had to ship things further and it took longer but anyway we get the results back and the cortisol levels are off the chart, they're through the roof. Her cortisol levels were so high and I thought thank you god that we did not give her herbs to raise cortisol, now based on just the case review and symptoms, OK she's tired all the time, she can't get out of bed, she's got anxiety etc. this has got to be low cortisol. Nope I was wrong, the cortisol was off the chart so what we do, we do exactly the opposite we use herbs and nutrients to lower and regulate cortisol levels and guess what we use herbs to lower cortisol and her energy gets better. Now to someone who's learned anything about adrenals it sounds like that's completely backwards and wrong but no chronic fatigue can be caused by too low cortisol or too high cortisol, so it's a goldilocks hormone.

**Alex:** And actually the symptoms between too high and too low are actually pretty similar as well right?

**Evan:** They are and I didn't know that until I started seeing people on a piece of paper where you take this lady whose really tired and wired, you take this lady whose really tired and wired and they have completely opposite rhythms. This one is flat all day, this one is high all day.

**Alex:** It's funny you mention that point because I've said it a couple of times but my biggest and pretty much my only major fear about this online conference is that people will listen to these kind of 40 or so feature interviews and they'll take a little piece of each interview, that bits great but then they'll go and buy one supplement from here, one supplement from there and put together a mishmash protocol without doing any testing, without working with an experienced practitioner and end up making things significantly worse rather than better because they're, as you're saying, they're doing supplementation based upon logic and theory without data to back up that's what they actually need. So I think it's a great point that you make.

**Evan:** Yeah that's why I call it a supplement graveyard, everybody has one, you know they go to the health food store, they hear a podcast, they hear about some magic supplement they are supposed to buy so they buy it and they take it and they're like why am I taking this again and it ends up in the pantry and the two years later you pull it out and you're like what is this stuff again, oh yeah some guy said it on a podcast and you don't know what to do with it. So I try to prevent people from building up the supplement graveyard because in fact you will spend more money in the long run by trying to guess and check rather than just getting the clinical data that you need to make an accurate game plan.

**Alex:** I think that's absolutely right. Evan I'm mindful of time, for people that want to find out more about you and your work what's the best way to do that?

**Evan:** Yeah they can just Google my name, so Evan Brand, and my website [evenbrand.com](http://evenbrand.com) had everything they need there in terms of clinical information if they want to reach out to me or I also have a functional medicine practitioner that I've trained in case my availabilities too busy, they can work with Megan. And also my podcast, it's free and I've been doing it for, this will be the seventh year. I put out a new podcast every week, it sounds like this just some type of me ranting on something crazy so people can listen to that, there's probably an answer to whatever symptom they have. Whether it's depression or Lyme disease or co-infections or mold and testing your house and improving your air quality and water quality, you know I cover topics like this every week and it's just called 'The Even Brand Show', people know how to access podcasts these days but look it up on your phone, iTunes or whatever app you use to find podcasts I'm sure you'll find me. Like I said it's

free so if you like what you heard today and you want to hear more that's where you should go.

**Alex:** Awesome, Evan thank you so much I really appreciate your time it's been a punch and I think really helpful dialogue so thank you very much.

**Evan:** Thank you for having me it's been fun, you had great questions.

**Alex:** Thanks man.