

Dr. Jolene Brighten:

That's where society comes in and the narrative is like women are so weak because they bleed and they have a period so they can't keep up. And it turns out, it's actually a time where we're strong. We can find that ourselves in the follicular phase, experiencing less pain, we can recover from exercise better and we find that we can actually gain more muscle mass in that follicular phase. And that's because of the powers of estrogen and testosterone.

Announcer:

Bulletproof Radio, a state of high performance.

Dr. Jolene Brighten:

You're listening to Bulletproof Radio with Dave Asprey.

Dave Asprey:

Today's cool fact of the day is that bad moods are completely contagious, at least if you're a raven. And this is new research from the University of Vienna where they look at ravens and ravens are really adept at showing empathy. And the researchers wanted to understand one building block of empathy. It's like whether animals do share emotions. So to be able to feel for others, you needed to be able to feel like others. So they took these relatively smart birds and looked at a cognitive bias test, which is like viewing a glass half empty or half full to figure out emotions and social behavior in birds. Yes, they're that smart. And they watched whether birds reacted positively or negatively to something that was neutral. And it turns out ravens reacted more to seeing how their partner process their reaction rather than reacting on their own, which is funny. So there's something that is just neutral, but you look at the person next to you and you feel what they feel not what you felt, which is creepy, well, at least if you're one of these creepy birds.

Dave Asprey:

Now, speaking of creepy birds, on the trip Tibet where I first had yak butter coffee, that was the spark that caused me to create Bulletproof Coffee, this yak butter tea. Everywhere I went, there were these insanely large ravens, ravens beyond belief. I don't know how big their wingspan was, but it must have been like two meters. I'm totally making that up. It could have only been ... they were big. And I'm looking at it going, what do they eat? There's no rabbits, there's almost no game. It's a very sparse part of the world. Well, what they eat is people, because in the remote parts of Tibet where I was, they actually practice a Tibetan sky burial where when someone dies, they chop them up into little pieces in the ceremony and the birds eat them. And in that way they returned to the environment and you practice the cycle of life. So the reason I saw these really smart, really giant birds is because they ate people. And in case you're wondering, no, ravens are not vegan. Just saying.

Dave Asprey:

More seriously, what does that mean for you? It means that how you show up in the world may, in fact, I would say almost certainly does affect other people's emotions in a way that you didn't think about. That means that if you take that glass half full, if you have enough energy because you ate right, because you did things right because you became a biohacker, you have that energy and you can choose how you respond to something and other people also choose positively. You've had a much bigger impact on the world than you think. This is one of the reasons that I'm so passionate about having people properly nourished because when you have more energy, you are wired to be kind to others and people will see

it and they will copy it. So this is how each of us makes a big splash in the world. This ripple that spreads out from us just from having enough energy to be nice. So even if your friend is not a raven, be nice, take a positive thing and maybe it'll spread.

Dave Asprey:

Today's episode is going to be a lot of fun because Dr. Jolene Brighten is coming back on the show. She was on in 2019 and she's a prominent leader in women's medicine and emerging science of post birth control syndrome. She's a functional naturopathic medical doctor and nutritional biochemist, and she's really looked deeply at what hormonal birth control does to women and she's working on uncovering the root cause of hormonal imbalances. And when she came on the last time, we talked about her new book *Beyond The Pill* and how to have better sex without the pill. And the episode before that, we looked at how women's hormones affect your bodies and brains at different stages in life. And this time I wanted to go deep with her on hormonal superpowers. Basically, what are the things that hormones can do for women specifically that give them more abilities and more capabilities than they would normally have. Dr. Jolene Brighten, welcome back on the show.

Dr. Jolene Brighten:

Hey there. Thanks so much for having me today. I'm excited for this conversation.

Dave Asprey:

Now, you just launched the paperback version, congrats by the way of *Beyond The Pill*, your book with a plan to get off the pill and figure out how to deal with the hormonal backlash that can come from that. But I want to know, you've already done that work for yourself. What hormones are you on right now?

Dr. Jolene Brighten:

What hormones? Well, right now I'm in my follicular phase moving into ovulation, so I'm actually on estrogen and testosterone predominantly. But in terms of exogenous hormones, the only one that I take currently for more leverage is melatonin. And in the past I have used DHEA as well, which is an adrenal hormone and a precursor to testosterone and estrogen. Everybody listening, that was after lab testing and it's showing that I did in fact need this. But outside of that, not on any other hormones. At this time in my life, you know what I just realized, that's totally a lie. I take thyroid hormone every morning. This is what happens when you're hyperthyroid and you've been doing it for seven years and you're like, "Yeah, no, not on anything. Oh wait, no, I'm on Nature Throid. Wow, that was an epic fail you guys."

Dave Asprey:

I'm on Nature Throid too. My thyroid was almost nonexistent when I was 26 and thyroid support is a very powerful thing. And I was attempting to hormone shame you for not taking exogenous hormones. And you totally didn't go for it. I was like, darn it.

Dr. Jolene Brighten:

It gets named either way. In women's medicine people are like, you're not on hormones. What's wrong with you? Wait, you are on hormones. What's wrong with you?

Dave Asprey:

Totally, right?

Dr. Jolene Brighten:

Yeah. It's so bizarre especially with birth control, if you're in your reproductive years, you go to your gynecologist and they're like, "You're not taking hormonal birth control? This is dangerous. What are you doing?" And then on the flip side, women can be in ... they can be post-menopausal and they go to the doctor and they're using bioidentical hormone replacement therapy and their doctor's like, "What are you doing? That's so dangerous." And it's like, okay, listen, we can acknowledge that all medical interventions have risks and that all forms of hormones that you are on internally making and also exogenous also have side effects. They can be out of balance, they can be used in the wrong way. Your genetics can come into play with all of this. But I think that so often we tend ... and it kind of is bizarre to me how in medicine they will vilify bioidentical hormones, but then praise and dismiss any side effects associated with synthetic birth control hormones. And I'm like, we really have to be going through risk benefit evaluation on the individual level for each woman.

Dave Asprey:

In Super Human, my most recent anti-aging book, I go into this in detail for testosterone for men and for women looking at bio identical. So the stuff that you lecture about at the American Academy of Management Medicine, I'm like, look, let's look at some studies here and all of the garbage that people hear, "Oh, if I replace my estrogen, I might get cancer, blah blah blah." It's just not even based on stuff that's real. It's stuff that has happened.

Dr. Jolene Brighten:

Or based on old research where they took the urine of a horse and gave it to women unchallenged by progesterone and then wonder why it is that you would even take that now and it's like we're not using the same thing and the dose, I think the other thing people need to understand is that when it comes to hormonal birth control, the dose of hormones you need to stop your brain from talking to your ovaries is a higher dose than what you would need topically just to get some symptom relief, post-menopausal or even in the perimenopausal years. And so I think a lot of those claims tend to be based on old research and also a misunderstanding that progestin, synthetic progesterone is not the same as bioidentical progesterone and it doesn't have the same benefits.

Dr. Jolene Brighten:

And when you get into the brain research, so I will say this, 20-something year-old me was like, why would I ever use those hormones? I'm going to be natural. 30-something year-old me after working with women for over a decade is like, sign me up for that when it's my time because I've seen the tremendous benefits and outcomes from that. Now, it's not right for everyone but if you look at just brain health alone, women are disproportionately affected by Alzheimer's disease. So right now the estimates is 66% of the population with Alzheimer's is women. And our hormones play such a key role in brain health. So they're involved. So estrogen, progesterone specifically involved in neuro-plasticity, our ability to learn new things. They also help us produce the myelin sheath.

Dr. Jolene Brighten:

For people who don't know what that is, think about a plug you plug into the wall, that little plastic that wraps around it, that's like the myelin sheath. It helps with proper nerve conduction. So it's my ability to speak and move my body right now. And so these natural hormones, they have a lot of benefits in the body and yet they get vilified and it's almost this throwback to better living through chemistry where it

was like, don't eat butter, eat margarine. Everything that nature has done, we can do better. Then you fast forward several generations and we're like, maybe not. Maybe we got that wrong.

Dave Asprey:

It just blows me away. You're saying, oh yeah, so there was a study on horse urine, which isn't the same as the stuff that's bioidentical. Well, okay, if we did a study on here's the effect of a liquid diet, they're saying, "Oh well, liquid diets are really bad for you." Like, well, the liquid was liquid margarine. That might be different than tomato juice. So the idea that even just halfway thinking scientist would look at the horse urine study and say this has any bearing on the other side of it doesn't make sense biochemically, it doesn't make sense at all.

Dave Asprey:

And you see the same thing. There was a company in the 1950s or 60s they just said one day, you know what, we have a guy in a white lab coat here and he says that coffee stunts children's growth. And of course he was paid by companies selling a burned grain beverage that's a competitor to coffee. And they're just trying to get parents to make kids drink their stuff. And to this day, we're, what? 70 years after this happened, people still say, "Oh, coffee stunts kids growth." No science, no evidence, no nothing.

Dr. Jolene Brighten:

Yeah. Well, and some of these studies too with bioidenticals or just looking at hormone replacement therapy were done on nurses. And these nurses are night shift workers. And what they found is that they did get ... okay so these women are getting cancer at a higher risk, but we also know that night shift workers get cancer at a higher risk. This is why you and I rock our blue light blocking glasses because melatonin, yeah. And melatonin is not just about getting good sleep. It's also really potent antioxidants protecting our brain, but it's also specifically protecting our ovaries as well as women. And that's one reason why researchers believe that light can be so disruptive to the menstrual cycle.

Dave Asprey:

It certainly can. And we all know, if you've read any of these things and you've certainly done the research, that if women are left without a lot of exterior lighting over time, magically your cycle syncs with the full moon, right? So of course light affects our biology and our hormones. It always has and it's just there. But we'd like to think we're somehow above mother nature. And your work really points out, sorry guys, you can hack your hormones. In fact, not dealing with the symptoms of perimenopause or menopause by consciously manipulating your hormones, you might choose to do that. And that is directly hacking with what mother nature wants which is for you to basically die.

Dr. Jolene Brighten:

Well I mean that's true though, right? Because we have to look at historically speaking, we weren't living this long and now we are. And a lot of proponents for bioidentical hormones say you have to look at quality of life here and it's not just about, okay what are the risks that come along with this? But it's the fact that this woman might stop having her period. Let's say it's 50 and she might live another 40 to 50 years. She deserves to have quality of life in that. And in fact, the dosage of like a topical bioidentical estrogen, progesterone in women, we sometimes use DHEA or testosterone as well. Those dosages to actually protect your bones, your heart, your brain, they don't have to be very high to get those benefits.

Dr. Jolene Brighten:

We can use weaker estrogens, so to speak, like estriol, that's an E3 vaginally for vaginal dryness, or we can use a DATA, which I actually prefer DATA vaginally for vaginal dryness, but also because it can be converted in testosterone and some of the research we definitely need more has shown that it improves the muscles of the pelvic floor. So actually strengthening the pelvic floor. Urinary incontinence is a big reason why people get put into nursing homes. This is like, we're talking major quality of life benefits, and it's something that if you are listening, you have pelvic pain, you have urinary incontinence and you're like, I want to jump on DHEA, you also need a pelvic floor physical therapists and other people to be part of your healthcare team. But you can get incredible benefits from these hormones. But it all has to be really examined through the individual lens.

Dr. Jolene Brighten:

If you have a history of estrogen positive cancers, then we don't want to put you on a protocol where you have these really high exogenous estrogens coming in. I mean there was for a while there people in the bio identical realm who were trying to get postmenopausal women to start menstruating again by giving them such high dose hormones. That's dangerous. That's playing with mama nature a little bit too far. But you're right. There are lifestyle practices that we can use to hack our hormones and then there are also exogenous hormones.

Dr. Jolene Brighten:

And this is something I frame to people who get really triggered by, oh my gosh, you're talking about getting a woman bioidentical progesterone? Well, you and I are both taking bioidentical thyroid. We are taking this because our quality of life would be completely diminished. Before I had thyroid hormone, I was gaining weight, I was depressed, I was fatigued, sleeping like 15 hours, wasn't able to get out of bed, was losing my hair, my nails were splitting to where they bled. Like that's not compatible with living a full and complete life.

Dave Asprey:

It's one of these things. I am really just happy and I would celebrate the ability and the right to have a 1% increased risk of insert name of big bad thing. In fact, there's four killers in Super Human. Cancer, heart disease, Alzheimer's, diabetes. I'll take a 1% greater risk of any of those things because the risk isn't that high anyway for my own individual risk. But if I swapped that for feeling amazing every day that I'm alive and saying, oh well I'm going to make sure my risk is a little bit lower, but I'm tired all the time. I'm fat, I'm cold, I get infections. Like these are the things that happened when you don't do it. And in medicine, this idea of do no harm, well, leaving someone exhausted and in pain all the time is not considered doing harm as long as they're alive.

Dr. Jolene Brighten:

Absolutely. And I think you hit the nail on the head there that there are people that take that very myopic perspective of, is your heart beating? Are you breathing great? You're still alive. We call it a win where you know there are people that are still alive that are like, but I don't feel alive. Like I know biologically I'm alive, but I'm not feeling like I'm actually living this life. And I'll be speaking at the Biohacking Conference and it's going to be exactly on these topics. How do we biohacker hormones, how do we leverage those superpowers and it's going to be very interactive. So we're going to be going through like, hey, what's your period problem? Let me know. Let's solve it right here right now. And let me explain it to you.

Dr. Jolene Brighten:

That way I want people who are there to really ... and I want men to show up as well because they could definitely be allies and understand how a woman's body works. But I want people who are there to understand their body much better than any sex ed class. Let's be real. In the United States, only 17 States mandate that sex education be medically accurate. A lot of people are walking around not understanding their body.

Dave Asprey:

Let's mention what the conference is for people who don't know about it. March 27th, 28th, 29th, Beverly Hilton, this is the seventh annual Biohacking Conference. The conference I started with a hundred people about eight years ago in San Francisco and now it's attracted thousands of people. It's a big, big conference in biohacking from the guy who put the term in the dictionary. So yeah, I invited you to come and speak there. And it's going to be interesting.

Dr. Jolene Brighten:

Yeah. Well I was there last year. It was a great time. I was actually getting an IV and people were coming up to me and they're like, "Oh my gosh, Dr. Brighten, I love your book." And started talking to me. And before I knew it I had like 30 40 women all around me. I'm hooked up to an IV. I can't go anywhere. And they're like, "Okay. So when this period problem comes up, what do you do about it?" Okay. Well, let's start with understanding where is the body having a bit of a physiological adaptation gone wrong in this modern environment. And so I hope people will join us because you're going to understand your body better than most doctors understand a woman's body.

Dave Asprey:

So that's something that you'll be talking about there. But I realized, I said at the beginning of the show, we're going to talk about the superpowers that hormones give you. When we talk about superpowers, the stuff you're going to be talking about at the conference, what are the specific hormone superpowers that you talk about? What does that really mean?

Dr. Jolene Brighten:

To understand the hormone superpowers, it starts with understanding how your menstrual cycle works and that you have receptors for these hormones throughout your body. So these receptors are not just on the ovaries. They're not just on the uterus, they're on your brain, they're in your cardiovascular system, they're in your gut as well. And that our hormones are really tied to every single system in our body, which means that when they're imbalanced, they can affect every single system of our body. And it's also important to note that this is also how birth control can affect every system in your body, because you can dock those whole same hormones on these receptors.

Dr. Jolene Brighten:

So when I talk about your hormones giving you super powers, it's understanding how to leverage their strengths throughout your menstrual cycle. For example, during our follicular phase, the first day of the flicker phase is when your period starts. Your hormones are going to drop to trigger the release of the endometrial lining. So you actually shed the lining of your uterus, and that's your period. Now, during that time, that's where society comes in and the narrative is like women are so weak because they bleed and they have a period so they can't keep on. And it turns out it's actually a time where we're strong.

We can find that ourselves in the follicular phase experiencing less pain. So having better pain tolerance, we can recover from exercise better.

Dr. Jolene Brighten:

In fact, there have been female athletes that their best times for racing, so running or swimming have actually been ... they've hit those milestones during their period and we find that we can actually gain more muscle mass in that follicular phase. And that's because of the powers of estrogen and testosterone. Estrogen is also helping with your creativity and how both lobes of your brain help you navigate this world. So you can be very, very strategic and all of that.

Dr. Jolene Brighten:

And as much as testosterone gets a really bad rap sometimes because yes, too much of it can cause you to lose hair on your head, especially if you convert it into DHT. You can have cystic acne, hair growth on your chin, chest, abdomen, these things nobody wants. So everybody who looks at testosterone is like, that's a man hormone, women don't need that. But in fact, testosterone helps us with our bone mass, it helps us with our body mass. So in terms of strength gains and muscle mass and in addition, it's really great for setting boundaries and that coupled ... so testosterone we think about with libido, but estrogen in that follicular phase leading into ovulation makes us plump up. So we get curvier, our lips get fuller, fine lines and wrinkles start to disappear.

Dr. Jolene Brighten:

So now we're feeling sexier. Here comes testosterone where our libido is going up, we're feeling more confident in that ... And that's a time where believe it or not, more people want to pay attention and listen to you as well. So there's interesting research showing that women in that ovulatory phase, so ovulation is a one day event, but leading up to it, estrogen and testosterone are rising. People are looking at you thinking, yeah, you look really attractive. Like I'm interested in what you have to say. And at the same time, there's been studies showing that female dancers, so like strippers, they actually make more money during this time. They're more likely to get tipped more.

Dr. Jolene Brighten:

So during that time, as much as people don't always want to be reduced to like, oh, hormones are just to make you look sexy, that is a time where you might feel more sexy and that doesn't mean you have to leverage it as like, oh, here's my time that like I go dating. But it might be a good time to take that photo for Tinder or it might be that good time to record a video and be on stage.

Dave Asprey:

The interesting thing there, you're almost sort of putting down that, well, it's about sexy. When a woman is ovulating and is giving a keynote presentation, it's not like every guy in the audience can be going, "Oh my God, I want to bang her." It's much more subtle than that and it's like, wow, my attention has been drawn. And then where my mind goes with that, it's probably a function of whatever my own personal situation is just as a man, but every person in the room is going to do that. And women also treat women who are ovulating differently. They pay more attention to them. And you can say that's because it's a threat and we're all chimpanzees or it could be because whatever, maybe they're going to support. I have no idea. But the bottom line is attention is a currency.

Dave Asprey:

So if you know where your body's going to be, it's hard to say, oh, two months from now I'm going to schedule myself to have a keynote on the day I'm ovulating. But it's really valuable I think for women to know, if I'm in the day or two before I [inaudible] or am ovulating and I'm going to be in the public eye, it's probably going to be like a home run. Okay. That's a superpower that's worth knowing about. And there's nothing that's crass or it's not about sexy. It's about attention. It's about turning heads. And the underlying biology of the cellular and hormonal and pheromonal level that might cause the head to turn, that's one thing. But what you do once the head turns is an entirely different thing. And you can just like have a superpower there.

Dr. Jolene Brighten:

Absolutely.

Dave Asprey:

We talked about whether you're in the follicular phase and you talked about pain sensitivity. There's a lot of women who don't track their cycle, maybe aren't going to know what phase they're in. By the way, I would encourage ... my first book was on fertility and all. I would encourage any woman who has a cycle to say, I'm going to learn how to do this because it's one of those basic biohacking skills. Like what's my body doing right now? And one of the things that is a very common signal for this that I want you to talk about, you talked about pain tolerance, but, okay, talk to me about what do more sensitive nipples mean for you on your cycle?

Dr. Jolene Brighten:

Where does this question come from?

Dave Asprey:

Because it's a very easy thing. All the women that I've ever dated are like, "I know the days my nipples are real sensitive and I know the days where they are not sensitive."

Dr. Jolene Brighten:

You can have increased sensitivity in terms of like arousal and that-

Dave Asprey:

It could be arousal or it could just be like they're more tender, right?

Dr. Jolene Brighten:

Yeah. And then it's one thing to flush out that sensitivity can be that like, oh wow, all of my tissues are a little more primed, a little more sensitive to touch. And then there is tenderness. And that usually happens in the luteal phase. So just coming into your period, the days before that because your progesterone and estrogen are heightened. And especially if you're in a state of estrogen dominance or estrogen excess or even making the wrong metabolites. And we can certainly talk about simple ways to biohack estrogen metabolites because that's important, that your breasts can become more tender, even more swollen. So some women will go up an entire cup size in their bra leading up to their period.

Dr. Jolene Brighten:

And that's something that like ... there's sometimes women that I talk with and they're like, "Oh no, I enjoy that." And then there's other women who are like, "It's so uncomfortable, I can't walk down the stairs." Well, that's pointing to most of the times that we've got excess estrogen going on and we've got to work on liver and gut health.

Dave Asprey:

Okay. So that's hackable, right? So we've got bad tender breasts is basically before your period and then the wow, they're sensitive in a good way. What does that tell you about where you are in your cycle?

Dr. Jolene Brighten:

That generally means you're coming up on ovulation. When you are like, mm, my partner's looking really good, especially like they come home from the gym and they're sweaty and you're like, I don't know why I'm so attracted to you. That's all their pheromones coming off. Another nature is really smart. Mother nature's like, well sperm lives five to six days. So let's get you in the mood about a week before you ovulate. That way we can capture some sperm, retain it in the uterus itself. And then when an egg drops, we're more likely to be able to become pregnant.

Dr. Jolene Brighten:

And so that is a whole mechanism that I tell women ... sometimes women are like, well, I'm practicing fertility awareness method and I just wait until I see fertile cervical mucus. And I'm like, let sperm be tricky. And they will hang out. And there is some evidence to that a woman's body will actually nurture the sperm and try to basically get the best of the best of the best to win when it comes to reaching the egg. And then the egg is also deciding who makes their way in. And so we've seen this in other mammal species with these vaginal crips. And as it turns out, it looks like humans are doing this too, big shocker. Mammals.

Dave Asprey:

So then tell me, you mentioned something, a lot of women and probably a lot of men with women in their lives are interested in knowing about, okay, if you have the uncomfortable period before your period, you talked about estrogen metabolites, liver, gut, what are some of the big things that people can do in order to lessen that discomfort?

Dr. Jolene Brighten:

This is exactly why there is a whole chapter on gut health and a whole chapter on liver health in my book and people are like, what's this got to do with hormones? Everything. So here's the deal. Your liver is responsible for metabolizing the estrogen that you no longer need and creating metabolites. The best, most favorable 2-hydroxyestrone, least favorable, four and 16-hydroxyestrone. Now, we don't have research that definitively says, oh, if you have elevated 16-hydroxy, then you're going to end up with cancer. But we do have research that says women who went on to develop things like breast cancer had a history of higher 16-hydroxyestrone. So after your liver packages this all up, you move it out through the urine and the bowels. But if your gut microbiome is off or you're constipated, you can be creating more beta glucuronidase that will basically undo everything the liver did and put it all back into circulation.

Dr. Jolene Brighten:

Now we're dealing with more estrogen than the body planned on. So number one is you need to support your liver health. Something that does really, really well in helping us make favorable metabolites is DIM. You can take this as a supplement, you can also get it by way of cruciferous vegetables and broccoli sprouts. Broccoli sprouts, it only takes about a fourth of a cup to give you the benefits of what over two pounds of broccoli gives you. So really easy hack, really inexpensive. For my college students out there, you can sprout these in your dorm room. And so this will support your liver metabolism as well things as high quality protein. So we need amino acids. We also need to be bringing in things like B vitamins as part of the protocol.

Dr. Jolene Brighten:

So your liver does this process, but how well depends on what's going on in your environment and how you're feeling yourself. And then when it comes to gut health, we've got to take care of that with not only feeding ourselves prebiotics, making sure that what is growing in our gut is optimized and you have to poop every day to get your estrogen out.

Dave Asprey:

So basically you got to poop every day. All right, but that isn't where I thought you were going to go with that one, but I'll take that. It's certainly true that if your liver works very well, it'll excrete lots of toxins through your poop. All right. Daily pooping.

Dr. Jolene Brighten:

Yeah. Well, here's another tip. Calcium D-glucarate. That's a nutrient that will help undo the beta glucuronidase action on that estrogen. So yes, you have to poop every day, but you also can benefit from taking a supplement that has DIM, calcium D-glucarate, things like resveratrol, green tea extract and B vitamins to support this whole process.

Dave Asprey:

All right. I have to go off a little bit on calcium D-glucarate. This is a supplement that everyone should know about. It's been in all of my books. Bulletproof makes a calcium D-glucarate and it's so important because in men it helps you get rid of estrogen metabolites as well. And if glutathione, and I think my work has helped to make glutathione a part of the world of biohacking, glutathione IVs and liposomal glutathione and make one as well. But glutathione is the primary detox pathway and certainly know that, but this glucuronization or is it glucuration, anyway, the glucarate pathway in the liver is the second detox pathway for all sorts of stuff that isn't even a hormone. And so if you're going to be supporting both pathways, you might as well do it. And just like you said, but that thing, calcium D-glucarate and not just any calcium, it works, I think differently for men and women, but it's equally important and something that I've taken every day for, geez, 15, 20 years and I think it works.

Dr. Jolene Brighten:

Well, you raise a great point that it works in men and sometimes men are like, well, I don't have the estrogen issues. I'm like, are you a human in the natural world being exposed to xenoestrogens? Everybody nod your head, yes right now. We are all being exposed to xenoestrogens and you can't go wrong supporting your body in metabolizing your natural hormones, but also your environmental hormones or the environmental toxins. And in addition to that, excess estrogen in men can lead to significant health issues. And it is something that lots of my colleagues who specialize in men's health are saying, they're seeing elevated estrogens in men more and more.

Dave Asprey:

I had more estrogen than my mom when I was 26.

Dr. Jolene Brighten:

Okay, that's not right.

Dave Asprey:

I know because my doctor had my mom's estrogen and had my estrogen and was like, "Dave, I've got bad news. You've got no thyroid and more estrogen than your mom," and less testosterone too actually. So I'm like, no, do I have man boobs? Who would've thought, and it was really enlightening to know that and to be able to then go in and fix it, which is really what you're talking about more from a woman's perspective. But the bottom line is if your numbers are off, you've got to do something about it. And I'm so happy that you mentioned that because it's an unknown supplement and one that I think really should be as common as vitamin C in today's world where you're getting BPA and weird pesticides and I mean God knows what else is out there.

Dave Asprey:

Now, you talked about progesterone as just like, "Oh, progesterone." Michael Platt's been on the show who talked about adrenaline dominance and he's been doing this for 40 years and pretty much you can say, "I have," and before you finish your sentence he'll say, "Add more progesterone." It's sort of like one of those things, but he has evidence like papers behind a huge number of things. Are you not sleeping well? Muscle tension, progesterone, progesterone, progesterone and that's an extreme view of progesterone. But when that's really interesting and has helped some people who've written in said, "Oh Dave Asprey, I have these restless legs. I never knew I could put progesterone on them and they go away." Who would have thought? So what's your take on progesterone? How does a woman know when to take progesterone, how to take it, the right dose, is it all the times, is it only during certain phases. Just walk listeners through this and if you have some data, tell me about men and progesterone too. What's your take there?

Dr. Jolene Brighten:

Yeah. Well, I want to remind everyone the very first time I was on your podcast, we talked about brain injuries and we talked about progesterone therapy for healing the brain. So guys, you definitely want to go back and listen to that. And it was you after my head injury that was like, take progesterone. And in the fog of my head injury, I actually went through the animal studies and did the calculations and converted it to my body weight and then, had my doctor prescribe it and it made a tremendous difference.

Dave Asprey:

Oh, it's so cool.

Dr. Jolene Brighten:

It is. And again, it was like of all people, Dave Asprey being like, take progesterone. I was like, I've never even heard of this. And for head injuries yet the research is out there showing that where you get a head injury in your menstrual cycle can determine whether you have a deficit a month and more later.

Dr. Jolene Brighten:

So progesterone elicits a lot of positive effects on the brain. Progesterone gives you that chilled out calm sensation and it takes you through that luteal phase where you feel at peace and in love with your life. It's because it stimulates the GABA receptor in your brain. Now, we only get progesterone in sufficient amounts post ovulation for what I'm talking about here. So if you are an ovulatory, you're not obviating or you have irregular cycles like PCLS, sometimes progesterone therapy can be really helpful, especially if you find that you are really irritable or you're crying uncontrollably, you have breast tenderness and you can't sleep. And the question I asked my patients when we are considering progesterone being an issue is if they are cycling. The week before your period, do you feel like you want to, A, kill somebody, B, runaway to the woods and never be seen again or C, do all of the above.

Dr. Jolene Brighten:

And they almost always answer C when it's a progesterone issue, because you just have no patience for anyone. So progesterone ideally let's say, our 20 something year old self, even our 30 something year old self, we want to support your natural progesterone production. We can do that by reducing stress and we can talk more about what role that plays bringing in vitamin C, bringing in Vitex. There's lots of great studies on Vitex for PMS and PMDD, which is a more extreme form of PMS, and making sure we've got ample B vitamins, especially B6 and B5 coming in as well.

Dr. Jolene Brighten:

Now, when to take progesterone? So there are women who, they've lost their period, maybe it's post pill, post-birth control, they've lost their period or they're just not having a regular period. Sometimes we'll use progesterone to induce a withdrawal bleed, a medication to induce withdrawal bleed. And that's so we don't get endometrial hyperplasia, building up of the uterine lining. But I also look at is, what does this woman's quality of life? If she can't function the week or two before her period because she's not sleeping, which by the way, people listening, if you are not tracking your sleep, you are missing out on crucial data. And you and I were talking about ... we had dinner in Vegas and you were talking about lion's mane helping you get great sleep.

Dave Asprey:

It was specifically Australian lion's mane from lifecycle. Normal lion's mane has never done anything for me. In fact, I read all the studies. Then I got sad because no neuro-plasticity, I launched neuro master, it's a fruit, not coffee bean extract for brain derived neurotrophic factor because I had given up online and then I took the stuff that completely changed my REM sleep. But it's like a specific one. Okay, I remember that conversation. All right, so where are you going with it?

Dr. Jolene Brighten:

So I tried lion's mane. I was like, I'm going to start taking lion's mane in the evening and during my last luteal phase ... So for everybody listening, understand the days leading up to your period is when you will have the worst sleep especially if progesterone's getting low. My sleep score on my aura ring was in 97 the day before I started my period. The month before it was like 80 something. And I'm like, okay, there's something to this here. So progesterone can also be helpful for you getting that restful sleep or not just talking about taking progesterone and falling asleep. It's staying asleep. It's REM sleep, deep sleep, getting really restful sleep.

Dr. Jolene Brighten:

Now, in terms of supplementing with progesterone, so I gave you the ... like, if you're not ovulating, here's some medical reasons, but maybe your perimenopausal, that's also a time to see anovulatory cycles. Everyone always thinks, oh, perimenopause, you need your estrogen. You're losing estrogen. You actually become estrogen dominant during that time because you don't have enough progesterone to challenge it.

Dr. Jolene Brighten:

So in perimenopause and post-menopause, progesterone can be incredibly, incredibly helpful. Now, if you want to use it just to oppose estrogen, let's say you're doing bioidentical hormone replacement therapy, you can use topical and that might look like using 20 to 40 milligrams topical. It's always better to start low and go slow because if you have too much progesterone, you will be a crying mess and your breasts will be super, super tender and it's almost looks the same as low progesterone, except you'll tell me, I am sleeping really sound and when I wake up, I'm so groggy, I can barely get out of bed. Okay, there's too much progesterone.

Dr. Jolene Brighten:

Now, if you are someone who is having the sleep issues or experiencing anxiety because low progesterone is associated with anxiety, you need to take an oral progesterone. That's the only way that we really get those brain benefits and that usually starting dose is 100 to 200 milligrams nightly. If you're cycling, we're doing it during the luteal phase and if you're not cycling, this can be something that you take every day. That helpful?

Dave Asprey:

I think that's super helpful. All right. I have one more question for you. You're a guy, you're listening to this show, your spouse or partner is not listening to the show and may not listen to the show and you want to tell her, "Honey, you need some progesterone, estrogen, you have some cranky periods that maybe you could work on." Best way to say that.

Dr. Jolene Brighten:

The best way to say it is to say, I've noticed that you report X, Y, and Z to me, because she'll say that. She'll say something to you. But saying like, "Hey, I notice like during this time you tend to report these things where you say these things to me and it's happened a couple months in a row. And I listened to this interesting podcast and I think that it might be helpful for you." Do not say something like, "Hey, you're freaking out and I think your hormones are imbalanced." If they are, she'll probably going to throw something at you. It is not going to go well.

Dave Asprey:

So you don't recommend just like, honey, let me give you a massage and you actually have progesterone cream on your hands. Nothing like that.

Dr. Jolene Brighten:

No, don't do that. We have to be really mindful-

Dave Asprey:

It's super unethical by the way. No one should ever do that.

Dr. Jolene Brighten:

Yeah, no, it's super unethical, but you raise a really interesting point though, I think everybody should know about especially sexually active people is that if these creams, these topical hormones are placed before intercourse, then you can be exposed to them. I had a patient that I was like, "Hey you apply these creams. You then have to wash your hands. Usually dish soap because they're oily and don't touch your husband." Well husband starts having issues. She's like, I'm not touching him. She was touching the dog and the dog was getting it on their fur and then the dog was cuddling with her husband. You don't touch anybody. You have to clean that up. And in addition, if you're using condoms and you're placing something like a DAGA or a estriol suppository, that is going to break down the condom. Now you don't have STI or pregnancy protection. So that's something to also be mindful as well.

Dr. Jolene Brighten:

And when we go through bioidentical hormone prescribing in my office, we do a whole history. We go through all the pros and cons and I give a whole sheet that women are like, this is really scary when I read it. I'm like, listen, it is very low risk that this is going to happen. But if you happen to be that like 0.5% who this might happen to, I want you to know about it. And so it's just about being informed and then also knowing that you can be dosing the people in your life with these hormones. That's a really bad idea if you have a man in your life or a child in your life and you're dosing them with estrogen, nobody's going to be happy at the end of the day.

Dave Asprey:

That was the other thing. I'm like, giving anyone any medication without their knowledge or permission is evil. But when it comes to testosterone and estrogen and less so progesterone, but even then. If you are using ... in fact, I'll put it this way, if you have children, especially young children and you are using a cream, you're probably doing it wrong. You have to be super paranoid. And so if you're a guy, no, you don't put it in your armpits, it's going to get on your clothes. It's going to get around. And it doesn't take very much to completely jack up what's going on in a young child. So that's why I quit using testosterone cream. When I had kids, my daughter is what, 12 now, but I used to put it in armpits or you put it basically as a guy, on the perineal area.

Dave Asprey:

But then you're like, okay, how does that enter my laundry cycle? What gets on my sheets and all that stuff. And you're like, "Oh, great, I have kids. I think I'll be injecting that for a while." Or like you said, suppositories, but it's got to be one of those things where you just don't leave a cloud of your hormone therapy around you. And it just, it doubly goes for if you have kids, it's that critically important, including your story of the dog. I love it.

Dr. Jolene Brighten:

No. But you raise a really good point and I think people do need to be mindful of this is that, with women, if they're using creams, they so often get to put them on the wrist. And I'm like, well good luck with that. You're going to put that on your pillow, your kid's going to get into bed at night. It is thinner skin. But I will tell patients, try the ankles and put socks on at night and launder your clothes separate than everyone else. But is it staying in the washing machine? I wouldn't think so.

Dave Asprey:

Probably not enough that way. But if you put your socks with everyone else's and you don't use a heavy detergent and hot water, yeah, there's going to be a film of it. Will it be enough? Who really knows? Probably not.

Dr. Jolene Brighten:

Probably not. But I'm like, it does actually raise an interesting point as I consider the endocrine disruptors in the environment because we tend to only look at one thing, especially when we talk environmental toxins. We're like the one thing in one product, it was found to be safe levels except that one thing lives in 12 of her products and she's exposed to it for decades. On end, we don't have that study. And so, it's the same thing with birth control as well as I look at like, well the risk for developing breast cancer is small like comparatively speaking to women not on birth control. We also have to evaluate, but what is her environment like? And is she living in the central valley of California and having high pesticide exposure. We know there are certain little hotspots in the whole world where you're going to get exposed to more environmental toxins, more things that can damage your DNA. So we have to be looking at this very holistically.

Dave Asprey:

There's also something called a U-shaped dose response curve. And so for some things, a super teeny tiny amount of it has a high effect, a medium amount, which they oftentimes study and the study has very low effect and then a high amount has a high effect. So a lot of studies miss these low amounts. So I would be very, very pissed off if I found that my kids were getting chronically exposed to low levels of testosterone or estrogen as a part of what, my wife, Dr. Lana and I are doing to help ourselves live longer so that we're a hundred, we can still be really effective parents for our kids when they're in their God, 60s, 70s, whatever.

Dr. Jolene Brighten:

I know this thing. You are like, wait, what? How old?

Dave Asprey:

Yeah. You have to adjust your thinking when you realize you're going to live longer than you think you're going to live. And so I can't put enough emphasis on that and I don't think I wrote about it enough in Superhuman when I talk about all the hormones, I think I gave it one or two sentences. But for people listening to the show, if you're the time of either planning a family or you have a family or you're spending time around kids, even time around puppies, keep your hormones to yourself, that is important.

Dr. Jolene Brighten:

That can be a tagline right there, keep your hormones to yourself.

Dave Asprey:

Exactly. It can be used in all sorts of ways. And I think we answered the right question for what you can do if your partner is experiencing some hormonal irregularities that might not be readily apparent because as a guy, most guys who've been in relationships for a while, they're like, man, this is one of those things where you just don't say anything but like, okay, today is just a day where I think I'll work late because it doesn't matter what I do.

Dr. Jolene Brighten:

And don't talk to her during the peak time. So if she is having those symptoms, it's not the time to call it out. Wait until it subsides and then say, "Do you remember a few days ago what was going on? And like, I just-

Dave Asprey:

And there were like horns coming out of your head.

Dr. Jolene Brighten:

Yeah. And this approach is like, I really care about you and I want to help support you but yeah, don't approach her if estrogen has hijacked the system and she's super irritable and there's not enough progesterone. You can walk on coals. That's a little safer endeavor.

Dave Asprey:

Daniel Amen, one of his early books, he was just on the show again, a famous brain doctor, a psychiatrist. One of the tricks that I learned that's really effective is, like, I have to go to the bathroom. Because no one can yell at you for having to go to the bathroom. So like, I'm just going to extricate myself from this insane crazy situation. Like see you, and then you go away. And that gives you an automatic cooling off period. So now if you're a woman aware of your cycle and you plot the frequency of your partner's random trips to the bathroom, you may find that they increase as your hormone levels change and you get a little bit more cranky. Just saying, not that that would ever happen in my house.

Dr. Jolene Brighten:

It has happened in my house. I'm going to say that straight up that it was after having my son and when my period came back and I was hyperthyroid and none of my hormones were right and I was like, my husband is spending a long time in the bathroom and then you can see on social media when somebody has been online. I'm like, he's just sitting on social media. What's going on? This is what women do. We are great detectives and I was like, "Are you seriously going and hiding in the bathroom? You're in there for like 30 to 45 minutes." At first I was like, "He has serious digestive issues," and then I'm like, "No, wait a minute." And he's like, "I am straight up hiding." I'm like, "Okay, I need to get my stuff in check."

Dave Asprey:

I absolutely love it. I'm glad we actually talked about that on the show because now there's a whole bunch of guys who are both set free by this new technique and whole bunch of others who are now busted. So I think overall it was a solid for humanity. The other thing that people could do is you could pick up a copy of Beyond The Pill. It's beyondthepillbook.com, your new book. Well, your new paperback book anyway. And just be like, "Hey, there's a whole bunch of cool hormone stuff in here." And supporting someone with information in a nonjudgmental way is particularly cool. And I have had that conversation with women that I've dated or had relationships with in the past. Being an early ahead of the curve biohacker comes with a downside of, I've known that pills are bad, that the pill is really bad for women's health for more than 20 years.

Dave Asprey:

And I'm like, look, we're together and I totally don't want anyone ... I don't want you to get pregnant. That's not the deal here. But because I care about you, could you please consider going off the pill

because you don't even know what it's doing to you. Like I don't want you to die. And having a book to give someone when you have a conversation like that is a really good thing. So you could phrase the conversation as like, hey, you want to own your hormones and all, I care and this isn't about, I want to change you. This is about, I want to support you and that can feel really good.

Dr. Jolene Brighten:

So I have to share with you that last year, the book came out and on Valentine's day there were all these women posting photos of the book saying, "This is what I got for Valentine's Day." And immediately I was like, "And is that a good thing?" And they're like, "Yes, I love this. And I feel so loved. I feel like my partner is actually invested in me. I feel like they care about me." And I was blown away. If you'd ask me like, "Oh, you wrote this book, is it going to be a hot sale for Valentine's gifts?" I'd be like, no way. Turns out 100% loved by the women who received it for Valentine's Day.

Dave Asprey:

Well there we go. So a good Beyond The Pill for Valentine's Day. That's actually really funny. I'll support that. On that note Dr. Jolene Brighten, thanks for coming back on and talking about all the odd stuff like hormones and poop and things like that, all this stuff we really wanted to get into and progesterone and all the other stuff that I didn't think you'd say. And at the end of the show here, I think we kind of had some of the hacks that no one ever talks about, like hiding. On that note-

Dr. Jolene Brighten:

That's your primal self-right there, hiding.

Dave Asprey:

Exactly. Self-preservation, the first F, fear, flee or freeze. There we go. All the good efforts. On that note, thank you for coming back on Bulletproof Radio. Thank you for just being a tireless advocate for helping women get their hormones where they want them to be so they can feel and act how they want to and for putting the relatively volatile message out about, look, the pill is not liberating you. It is not helping your health. It is preventing you from getting pregnant, but there are other ways that will not take away some of your vital spark and your longevity. So I just think it's such an important message and you're handling it really well and thank you for carrying that torch. And on that note, have a wonderful time at that Upgrade Labs Biohacking Conference, upgradelabs.com/conference. Come hear Dr. Jolene Brighten, come hear me and come hear lots of cool people. Speak, meet other people and play with all the toys of biohacking. It's in Beverly Hills, March 27 through 29th, upgradelabs.com/conference.