

# Ep #286: How to Optimize Your Genes to Transform Your Health with Dr. Tyler Panzner



## Full Episode Transcript

With Your Host

**Victoria: Albina, NP, MPH**

## Ep #286: How to Optimize Your Genes to Transform Your Health with Dr. Tyler Panzner

This is *Feminist Wellness*, and I'm your host, Nurse Practitioner, Functional Medicine expert, and life coach Victoria Albina. I'll show you how to get unstuck, drop the anxiety, perfectionism, and codependency so you can live from your beautiful heart. Welcome, my love, let's get started.

Hello, hello, my love. I hope this finds you doing so well. Happy my birthday week, month, season to you all. Typical Leo, I've got to say. Thank you for the birthday well wishes.

This week, I wanted to share something a little different than what we usually do here on *Feminist Wellness*. This week, I'm sharing an interview with Dr. Tyler Panzner. He's going to introduce himself, talk about all his nerdy bona fides, and I want you to know why I'm bringing him on the show.

First of all, he's the first dude on the show. That's kind of fun. And he's a nerds-nerd's, nerd; like dude is a nerd's nerd. If you're new to the show and you're wondering if that's a compliment, it's a major compliment. So, hats off to you, Dr. Tyler.

I brought him on because sometimes it's not your thoughts, right? Sometimes it's more than your thoughts. Back in Episode 190, we talked about this. This is what I call "taller toddler". So, like most of us listening to the show, or I have either met, at some point were toddlers. And I'm just going to say 'most of us' because I don't want to make assumptions.

You know how toddlers are, what they need, to nap and look at sunshine and play and nap and have snack and have water and play and nap. They have really basic needs. Sure, they overcomplicate and dramatize, but who doesn't?

And we, as taller toddlers, forget that at our core, we're just those wee ones. We're just those sweet little baby versions of us that need delicate

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care, and deserve sweet and delicate care like naps, like getting enough rest, and enough water, and time with friends, and playing outside, and sunshine in our face first thing in the morning. We deserve that. We need that. It is vital.

Instead, what happens is we get so swept up in this capitalist do-do-do machine, we forget to be. We forget to step into intentionality and presence. Sometimes it's not that we forget, it's that early on in childhood, when our nervous systems were getting their settings, it wasn't safe to rest, right? So, we learned not to.

We learned to deny our wants and needs and feels, and taller toddler-ness, for so many smart reasons. And I am here to encourage each and every one of us, if we want to step out of emotional outsourcing and to live lives we love, it behooves us to not just stay in our cognition and not just do thought work, and also not to just spin around in doing somatic work and breath work and spiritual work, but to also ask ourselves:

Did I drink too much coffee? Did I take too much B vitamins? Is that why I'm irritable? Why am I antsy? Have I had enough water? So, we need to ask those taller toddler questions.

Episode 190 is all for you. If you're like, "Wait, what?" The reason Dr. Tyler's coming on is because he talks about genetics... I don't want to give too much of it away, it's really fun... and the role our genes play in our emotional, physical, mental health and wellness.

And so, it's really important to understand who we are as whole animals before we start labeling ourselves, categorizing ourselves, telling stories about ourselves, right? We get to dive deeper, yeah? It's really important to look at all aspects of our wellness. So, that's what we're doing today with Dr. Tyler, taking a deep dive.

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If you listen to this episode and you're like, "Ooh, I want more," he was kind enough to actually read all of my genetics. And since I love giving presents for my birthday, I'm giving a special present. At the end, I will give you the URL. You can head right there and download a conversation between him and myself where he goes through my genetics.

You don't get my whole genome, but you get a whole lot of it. So, we're going to talk about COMT, SUOX; it's really very interesting. Of course, I say this in the conversation, but I want to say it here, genetics is not the end-all be-all. Epigenetics is a huge thing. The role of our environment, right? And what genes our environment is turning on and off, right?

The expression of our genes is a huge thing. And we cannot just say that our genes are our destiny. That's really reductionist. And Dr. Panzer is not saying that. I'm not saying that. I'm just being really clear that his work is part of the bigger picture.

And I will also say, since doing what he recommended... I wanted to do it for three months before releasing this episode because that seemed ethical as a start... I feel way better in some ways that were unimaginable before meeting with him.

So, I will also say this very clearly, he is not paying me. I asked him to come on the show because I find his work really interesting. He gives a referral code at the end. You can put in "Feminist Wellness" to get 10% off or something. I don't make any money off that, right? That's not my jam. It's all above board is what I'm saying. I wanted to say those things really clearly.

It's a really nerdy episode. I really hope you enjoy nerding out on it, because what do I love to do more for my birthday than nerd out, right? All right. Hope you enjoy it. Ciao.

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Victoria Albina: Well, hello, hello. Thank you so much for joining me here today.

Dr. Tyler Panzner: Yeah, absolutely. Cannot wait to share some game-changing health information that I bet all of you guys listening have not heard about before. Appreciate to have this platform to share my mission, that I think is a necessary and overlooked component of health optimization, and just figuring out how to not feel so blah each day of your important life.

Victoria: I love that. And I love that you said ‘each day of your important life’, right? Because each day really does matter. Why not make the absolute best of it? Well, I'd love it if you could introduce yourself. I find we do such a better job introducing ourselves than anyone else. So, who are you?

Tyler: Yeah. So I'm Dr. Tyler Panzner, a PhD scientist that is trained in cell biology, how cells function in health and disease, and pharmacology. So, this is the study of how substances affect cells. It's different from pharmacy. I get that question a lot.

Pharmacy is more about taking existing knowledge about drugs and medications and working with doctors and figuring out and fulfilling prescriptions. Pharmacology, I'm the guy in the lab coat... or I was the guy in the lab coat... with the pipettes, working with mice, dissecting tumors. I'm the one doing the research. Figuring out how to make new drugs, how these things work, how can we modify our cellular behavior away from disease and towards “the state of thriving”, as I like to call it.

I studied anxiety, depression; all different types of neuroscience. Definitely my number one research interest. Ended up doing my thesis work on breast cancer metastasis, inflammation, and really got interested in personalized medicine when I used my 23andMe data.

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I dove deep into that, and I was able to resolve so many of my chronic health issues by figuring out exactly what nutrients my cells can't absorb as well, can't transport as well, can't use as well. And on the flip side, what am I sensitive to? What do I absorb too easily and not break down well enough? Looking at those genetics.

So, no guessing, figured out where my molecular weak points were, supported that naturally, and I was able to avoid a lot of medications. I did that for years with friends and family.

Made it into a business now, Holistic Genetic Health Solutions. And there are a lot of companies out there, and we can get into this more about where I'm different in certain aspects... But just the way my brain sees these patterns.

And the pharmacology aspect. I work with people every day that are sicker on their supplements. Doctors know their field of expertise, but they don't know supplements because they are not pharmacologists. So, I'm on a mission to educate not just regular people, but doctors, health coaches, that you can really mess people up with a supplement that really helps someone else.

Victoria: Yeah. It's wild. When I was starting someone on theanine... L-theanine is well-respected as a powerful anti-anxiety... but there is that one-in-however majillion people who has a paradoxical effect, like with Benadryl, right?

So, most people take the Benadryl anticholinergic drug and you pass out or you calm down at least. But that one patient who's up all night twitching, anxious, heart racing, freaking out, considering going to the ER. Yeah, I think if we all had access to and training in how to look at SNPs, at single nucleotide polymorphisms... and we'll have you explain more of what that is... before folks like me put someone on a regimen, right?

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I'm doing it based on the science. This one modulates Th1, this one modulates Th17... But how interesting to individualize it.

Tyler: Well, also those supplements can help Th1, Th2, but what other mechanisms do they have? Every supplement has multiple mechanisms. So, you may be skewing towards Th1, but what if that supplement also is an iron chelator or a copper chelator? And you have no idea about that.

I work with women all the time, but women are usually more prone to anemia. Their hair is falling out, no one knows why. Their doctors don't know why. It's the natural herb that they're on for their gut health. No one knows that it's chelating copper and iron. It doesn't say it on the bottle, and people are not pharmacologists.

It's about doing no harm first and foremost. And I see that all the time, and it's not negligence. People aren't aware of these things. But think about it. How much training do medical doctors have to go through in order to prescribe medications? How much education does a holistic practitioner need to go through to recommend supplements? Virtually none. It's the Wild West.

Victoria: It's frightening. Yeah, UCSF put us through the ringer when I was learning pharmacology, pharmacokinetics, pharmacodynamics. It's UCSF, right? They weren't messing around.

Tyler: Even that, those are more general pharmacology concepts. But from what I've seen... and I've talked to naturopaths that have gotten training. I have a 12-week Holistic Genetic Health Mastery program where I'm training practitioners. I've had some naturopaths in there, and they're like, "You weren't kidding. We know the very, very basics of these things." But that's why I call what I do "hyper-personalized".

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It's not about, let's ship out millions of DNA kits for \$200 a pop, give you a pre-made report, and figure it out yourself. That's why I have a one-on-one call with every person I work with. I streamline it. And it's not just what you need, it's what you should avoid. How do you know what you should avoid unless you really understand how these nutrients are working in the body?

I'm sure we'll talk about MTHFR, but everyone just says MTHFR. Take more methyl vitamins. I see so many people over-methylated. They feel worse because they're given so much of these methyl vitamins. I don't tolerate them very well. I feel horrible. Doctors just say, "Take more, more, more." Just because it helps one gene, it could clash with three others. And if you're not cross-referencing, looking deep enough, you could do more harm than good.

Victoria: It's like every deeper layer of learning in functional and holistic medicine that I do, I'm like, "Ah, it makes so much sense," right? It makes logical sense. What would you say to those who say that... Well, first of all, before I was about to go deep, deep, deep nerd... Will you, for folks who are like, "Wait, girl, what is this? What is a SNP? What is a single nucleotide polymorphism, please?" Let's go wicked basic cell biology.

Tyler: Absolutely. So, DNA is the code of life. It's a bunch of letters, A, T, C, or G. These four letters spell our genetic code. Our genetic code is instructions on how to make proteins. Everything that happens in your cells is done by proteins. They are the workhorses of your cells.

Whether it's to take up magnesium through your gut into your body, that's done by a protein. Whether it's to transport vitamin D throughout your body, that's done by a protein. Whether it's for serotonin to bind a receptor so you feel happy, that's done by a protein. All of these proteins are made by genes. That's a fact.



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Every gene is mutated. It can be mutated in tens of thousands of different areas. Everyone listening here, it's not if you have mutations, we all have millions and millions of mutations. Not every mutation... So, a mutation, a SNP, instead of an A, you have a C. Instead of a G, you have a T. One misspelling.

That instruction manual is how you make the protein. So, let's just say that protein that transports vitamin D throughout your body, that's to bind vitamin D. A certain area of it is like... think of it like a superglue, it sticks to the vitamin D.

Now, if there's a misspelling in the DNA, in the area that gets turned into that superglue area, it may not stick as well. So, what does that mean? That means it can't bind vitamin D as well.

And then you look at all the peer-reviewed studies. That exact mutation, that many of my clients have, many of you listening have, probably have multiple there, it's linked to lower vitamin D levels in the blood. And then it's also linked to vitamin D-related diseases. So, whether it's anxiety, depression, autoimmunity, COVID-19.

So, this is why a lot of people try to dismiss genetics, but we have the data showing these mutations are in fact linked to lower vitamin D. They're also linked to a higher risk of vitamin D-related diseases. And when you follow the logic, well, why wouldn't that be the case?

So, these misspellings... A gene can be misspelled in multiple areas. So if you have one SNP, it may not be a big deal. If you have 15 SNPs on that gene, they're additive together. So, that gene is barely, barely functioning.

And whatever that does, whether it's sense serotonin, whether it's activate vitamin D, your body will, for the rest of your life, will always not be able to do that as well.

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We can go into epigenetics in a little bit as well, which is very important. But I think a lot of people that try to focus on epigenetics, they don't really understand genetics. And that can really be, I'm not saying it's the only thing that matters, but I just think a lot of people aren't looking at it deeply enough in the right way. Or utilizing the right nutrients to, again, first off, do no harm. Second off is address as many mutations as possible with the lowest number of natural ingredients.

Victoria: Right. And I love that, because polypharmacy is such an issue, whether it's green pharmacy or chemical pharmacy, right? I have had... I can't tell you the number of times patients have walked in with a suitcase full of supplements. They're like, "This is what I take before breakfast."

Tyler: And I will guarantee you many of those things are working against them. Because here's the thing, too. They may say, "Oh, I'm only on eight supplements." Well, each supplement has 10 ingredients. So, you're on 80 things. I am not a fan of big supplement blends. I change people's lives by just getting them off the wrong supplements.

Someone with anxiety comes to me. They're on things like rhodiola rosea, fenugreek, methylene blue, curcumin, piperine. These all slow down the breakdown of adrenaline. And the doctor put them on, or their coach put them on six of these things. Of course, they're using them for inflammation.

They're using them for things like TH1 or TH2. They're using them for mitochondrial biogenesis, which is great.

But you're not aware you put someone with preexisting anxiety on six things that are further raising their adrenaline. Don't wonder why they're off the deep end. I'll ask them, how long has your anxiety been worse? Probably for the last six months. When did you start these new supplements? Six months ago.

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And then they'll be told, "You're detoxing," which can be a thing. But you don't detox for six months. You're on the wrong supplement; that's jacking up your adrenaline and it's making you so much more anxious.

I'm telling you, I see this every single day in my practice. And these are coming from very notable naturopaths or functional medicine practitioners. But again, they don't know the supplements deeply enough.

I've dedicated my life to this. And again, it's just crazy to see how much unnecessary suffering there is because the supplement industry is massive. And what is a drug by definition? A drug is anything that alters physiology. So, by definition, these supplements are drugs.

Pharmacology, whether it's a drug target or supplement target, they're just cellular targets, right? So, I view them as all the same, especially when we're concentrating supplements. "Take this 20x herbal blend, or take this chemically modified curcumin that's 3,000 times more absorbed," at what point is that considered a drug?

Victoria: Yeah. So, I come from herbalism first, and then I went into Western medicine and then looped back around for functional medicine. And so, as an herbalist, I learned in the wise woman tradition, right? To use simplers, to use one herb at a time, right? Make a nettles infusion, see how that feels for a couple of weeks. Maybe we'll add red raspberry. You know what I mean? And it is really wild to read the back of supplements and just see that there's 6,000 herbs which all held together with what, licorice?

Tyler: Licorice also raises adrenaline, by the way, too. So, that's another one too. And again, it's not that these are bad for everyone, right?

Victoria: Sure. But again, to your point of individualized medicine... And just to sort of pause and speak again to why you're here, I talk so much about the social determinants of health, our nervous system based determinants

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of health. The things that keep us stuck in the old bind with our mental health, our hormones, our sleep, etc. etc. etc.

And so, while we're doing the work to shift our mindsets, to regulate our nervous systems, to do that deeper emotional work, we have to remember that we're humans in a human body, right? And so, I get to this point where I sometimes see clients who are beating themselves up.

Like, "God, I'm doing all of the things to feel better, to have better mental health. I put the blue screens away, I'm going to bed on time, I'm doing my thought work, and I'm doing all the somatic practice, but I feel like flaming hot Cheetos. What's happening?"

Tyler: Well, it's funny. That sounds like 95% of my clients, because I'm not the first... You don't go to see a holistic genetic scientist; I'm the end of the road for most of my clients. And let's just say a mutation, 25% of the population has it, by databases. But three quarters of my clients have it, because I'm artificially selecting for people with worse genetics.

Listen, functional medicine is light years out of conventional, but it's still "X symptom protocol".

Victoria: 100%.

Tyler: Anxiety protocol. Yeah, we're on the same page here. These natural things are better than medications, but it's still... I don't have a "mold" protocol. I will build a "you" protocol.

And you'd be shocked. I've had a client with MS and someone else with anxiety, someone else with psoriasis. Genetically speaking, they're on fairly similar protocols because I look at pathways. The vitamin D pathway is linked to virtually any disease you could think of.

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So people ask me, “Well, what about these genes linked to fertility?” Well, all of them. I think of things rather, I make cells work better. What pathways need more support? Which ones are overactive? Let's dial those up and down and watch because your brain, your mental health issues, your gut issues, your skin issues. They're all connected, yet we go to different specialists for all of them. They don't collaborate together.

Again, the functional medicine, it's still X protocol. And why is nothing worked for you thus far? Because what's the one thing no one has looked at properly? The genetics and the supplementation. And that's my wheelhouse.

That's why the people we've seen have been to Mayo Clinic, they've been to these big institutions, it's because they're not looking deep enough. A little bit of a tangent there, but just love this stuff so much.

Victoria: No, I love the tangent. And a huge part of why I invited you on is your absolute ridiculous passion for this level of nerdity.

Tyler: Nerdity, love that one. I'm keeping that one in my noggin'. Yeah. Nerdity, love that.

Victoria: Always. All the nerdity. We'll make t-shirts. We'll have both of our faces on it. I think it'd be good. And then a double helix in the middle. That's amazing.

Tyler: Ooh, maybe we could be the histones unwinding the DNA too. That could be cool.

Victoria: Let's. I think it's a great plan. All right, so keep an eye out for our merch. That's amazing. So, I want to make sure we talk about two big things: Epigenetics. I talk about mitochondria. I mean, wait, important question. What is your favorite organelle?

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Tyler: Ooh, I would probably have to say the endocytic transport system. I've studied exosomes in my PhD. So, these are what release little vesicles and how cells communicate with each other. If you guys that aren't aware, imagine sending little letters of mail across the body and other cells could pick them up. So, how you take them in, read them, get what you need out of them, incorporate that into your own cell, and then what you could send out to your other cells to let other cells know what they should be doing.

Victoria: That's so cool. Does it make me super basic that I'm really wildly into mitochondria? Are you like, "Hmmm..."?

Tyler: Hey, would I tell people, "Whatever dumps your dopamine"? That's how I look at it. Whatever dumps your dopamine, go for it. Whatever music does, whoever this, this, that, whatever. That's the name of the game at the end of the day. Well, whatever healthy thing dumps the dopamine, of course.

Victoria: Oh my goodness. Yeah, yeah, yeah, yeah, yeah, yeah, yeah. Of course, of course. That's really funny. That's going to take me on a different tangent. We'll come back to epigenetics and back to talking about my genome. So, dopamine. This is a thing I hear all the time. People often say, "Sometimes I feel so low. I have ADHD. How do I "bump" my dopamine? How do I get a dopamine hit?"

Can you please debunk the hit thing... And yeah, let them hear it from not me.

Tyler: This is where you need to think about mechanisms. So, the methylation process, which I'm sure we'll go into more when we talk about epigenetics, it's how you regulate epigenetics. It's also how you make neurotransmitters. So, think of that as the neurotransmitter factory.

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In a factory, you need ingredients to make these things. So, you can take things like L-tyrosine or phenylalanine... These are the amino acids that your factory, the methylation system, turns into dopamine to be released.

I'm not the biggest fan of that for a lot of people because you raise dopamine, you also raise adrenaline. So, you see how they usually go hand in hand together? Then there's the methylation system itself, the factory. How well is the factory working? I like to have people to figure out, again, which methylation support you need, which step, which nutrients.

Is it a methyl folate or is it SAME or is it a trimethyl glycine? What do you need to support your system so the factory workers could do their job the best? You may not need more ingredients. Your workers may just be lazy, aka mutated or not fueled properly.

Then you have, once you release the neurotransmitters, once you release the dopamine, there are things that break down the dopamine. Things like the COMT gene... which we'll talk about in a bit... how well you break down dopamine. I break down dopamine and adrenaline four times slower than a normal person due to my mutations.

I'll give you a little spoiler now. You actually have a double mutation too. We'll dive into that more. And I could tell the second I started talking to you, you had this. This is one of the most easiest to predict. These people are usually Type-A, very extroverted, very conversational. It correlates with high achievers. I think a lot of podcasters, influencers... That higher dopamine to want to just put yourself out there and do that.

Now, that can protect against depression, but it's also more at risk for anxiety because then, when we dump that adrenaline, we break down adrenaline slow as well. So overall, these can be people that are very, very sensitive. If you're listening now, throughout your life... This has been me throughout my life. It was always, "Tyler, calm down. Tyler, stop

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overthinking it. Tyler, just let it go.” You're nodding, you're the same way, I'm guessing.

Victoria: I don't know what the hell you're talking about, sir. This isn't insanity. Go on.

Tyler: Yeah, they call it worriers, neuroticism, overthinking, but also highly creative. So, when I'm not stressed, I have higher dopamine levels than usual. That makes me more creative, more able to think outside the box. People ask me, how'd you learn to think outside the box? And I always just say, “What box?”

Victoria: Exactly. Yeah, me too.

Tyler: I never saw the box. And part of that's due to the dopamine.

Victoria: Yeah. I tripped over the box though, because I was going so fast.

Tyler: Well, again, that high adrenaline, the very high... So, if you're one of those people that you could get stressed easier and you stay stressed longer than you think you should, that adrenaline's floating around. So, lithium is something that really changed my life as well, lithium orotate.

Any of you listening that do have a lot of stress, fight-or-flight issues, get 1mg of lithium orotate. I love the Pure Encapsulations brand. Try that any time of day with a little bit of food. Within 30 minutes, it changed my life. Quiet in my brain. And how this works, that COMT gene that's too slow.

Rather than taking a Xanax to blast your body with calming signals, even lemon balm, which is great, that raises GABA. It calms the body down. Lithium helps you break down adrenaline faster. It speeds up COMT. So, think about this. It's literally helping you lower the adrenaline in your body. I've not come across anything else that does that.



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All the other calming stuff, which I do love, you know, like the taurine, glycine; I love those things. But this gets rid of the actual adrenaline. And it also helps your dopamine 2 receptor, which I have mutated. It actually also helps you sense dopamine better. So, it doesn't raise dopamine levels, but it helps you sense the dopamine better while lowering the adrenaline.

So, you can feel more motivated, but not as scared and frazzled overall.

Victoria: Wow, and that's just 1mg.

Tyler: The first time I tried it was 5mg before bed. That next day was life-changing for me. One milligram still has a noticeable effect. But I tell people lowest effective dose. I'm a big supplement guy. I'm a fan of numerous supplements that are targeted based on your genes. No mega doses of anything. Because guess what? You don't need mega doses if you're hitting the right pathways, multiple of them, minorly to moderately.

Victoria: Yeah. Which makes so much sense and is, again, returning to a wise woman herbal sort of framework, right? Versus heroic dosing. Which having been trained in both, I'm going to go low and slow. Because I've never hurt anybody low and slow. I might still do heroic doses of echinacea or something if I like feel like crap and have to get on a plane. But low and slow.

Tyler: You know, when I work with people, sometimes I'll have them start 10 things at once. And now people will say, "Oh, that's so many things." I'm like, "Well, listen, aside from a good multivitamin catered to your genes, I use individual, sole, one-ingredient products. You were taking three things before that each had 10 ingredients. You were on 30 things before. Now, you're going to be on actually 10 things." So, it may seem like more bottles there.

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But also, I used to think I was the one-in-a-billion. The most sensitive person ever that responded to weirdest supplements. It turns out most of my clients are just like me.

But since I dove so deep and cross-referenced everything, I've had so many clients say, "I'm so afraid to start them all together." I'm like, "Trust me, try it. If there's any issues, shoot me an email. We'll pull it back." 95% of the time, because no science is perfect, 95% of the time they're like, "Holy freaking crap. This is an entirely new world for me."

Because I'm making sure people aren't sensitive to supplements. They're sensitive to the wrong supplements for their body. And my job is to make sure I'm educating you about what supplements aren't good for you. And of course, not putting you on any that I think aren't good for you.

So, this perfect harmony of all these nutrients you need, while none of them are raising adrenaline, the lithium is lowering your adrenaline, you get the right nutrients in. So, you feel safe and you feel empowered and you're nourishing your cells.

Victoria: Beautiful. I don't ever feel like I feel my supplements.

Tyler: Yep, I get that a lot too. Yep.

Victoria: I take fistfuls of stuff, because logic and science, without the genetics, has told me I should. Where do you start with folks like me?

Tyler: Yeah, I mean, I've had a lot of people that say that. And then, getting on the right ones they're like, "Okay, this is a whole new ballgame." One thing I'm sure you're aware could be gut health; gut absorption of things. But I'm sure your gut health is pretty up there if you're taking care of yourself, trying to do your best. That could be one aspect of that there.

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But a lot of times, if you don't feel melatonin supplements, maybe you don't need more melatonin. If you don't feel your CBD, maybe your endocannabinoid system doesn't need some support there. And again, really making sure it's what the body actually needs.

And then a lot of it does come into... I'm not saying this is you... belief systems and things... Which we could go into as well. Some people identify with being sick. It may serve them well. They may be getting more care from their loved ones if they're sick. It could be subconscious.

I'm a deeply spiritual man. I believe in all these things. Genetics are just one aspect of it. I'll never claim supplements can outwork all that inner work. But from my point of view, how many psychotherapists, therapists are there? There are a lot. How many people are doing what I'm doing? Very little to none; exactly how I'm doing it, if you ask me. So I'm just shining the light on a new modality.

I mean, what is this inner deep healing everyone craves? It is epigenetics at the end of the day, more or less. And so, I guess we could kind of go into that now.

Victoria: Yeah. And if you could define it.

Tyler: Yeah. Genetics, we're the code of the DNA. So, when you make that protein, it will always not work as well. So, let's just say the TPH2 gene, the gene that makes serotonin. Let's just say that's mutated to work 50% as well your entire life. It'll never work better than that. That's a fact. That's a molecular biology fact.

But epigenetics means certain external factors, lifestyle factors, certain nutrients can make you make more or less of a gene. A lot of people like to use the word "on or off". I like the word "more or less". So, vitamin D, we know seasonal depression exists. Vitamin D, which you get from sunlight...

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Well, depending on how mutated you are, sometimes you can't do that as well. I'm one of those people...

But that vitamin D you make in your skin, it gets inside your cells. It binds a receptor that tells your cells, "Hey, go make Tyler more of the TPH2 protein." So, even though I'm making more of that protein, it will always work half as well.

But if I'm able to make double the amount of that protein, and they're working half as well, technically, I'm back at 100%. So, if you have a few mutations, sunlight, cold plunge might get you where you need to be. But if you have eight mutations there, it works 10% as well. I don't care what sunlight you get. I don't care what cold plunge you do. These are the people that nothing works for.

Epigenetics won't be able to outwork that. Now, hard to say exactly how common that is. But the epigenetics is how much of the gene you're making. When it comes to epigenetics, who's the one deciding? Who's the worker deciding how much of it you're making or not making of that protein? It's the methylation genes, the proteins.

So, your epigenetic capacity is dictated by proteins, which are made by genes which are mutated, though your genetics dictate, in part, your epigenetic potential. So, you see a lot of people just say, "Oh, the genetics don't matter. Just get sunshine. Just go outside." It's like, if it was that easy, I wouldn't be doing what I'm doing right now.

Because if you have a lot of mutations, you're going to need... If you can't make a certain nutrient that's used to turn on your genes, what are you going to do, aside from figuring out what nutrient that is and take more of it, on top of the sunlight, on top of the talk therapy, on top of all of these things? So, this is what I was saying.

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When people talk about mold or heavy metals, they don't think it's a genetic thing. But your genetics dictate your sensitivity to environmental factors. If you have mutations in heavy metal detox genes, you're at a higher risk for heavy metal toxicity. So, is it really that the people that get sick from environmental things are ingesting that much more of the toxins, or are their bodies not as genetically capable of dealing with them or breaking them down?

And I know the answer because I work with families. A family of five, they live in a moldy house; two of them are bedridden, the other three are fine. So, please explain to me then, how is it the mold's fault? You have people doing mold detoxes, parasite detoxes, every quarter. That's not the root cause fix. Why is your body such a good host for it?

Victoria: Interesting. Which of course takes my brain towards two pathways when talking about epigenetics. One, the impact of trauma. If we could talk about that. Second, I was talking with a friend recently about the increase in genetic conditions we're seeing in the newborn population in children, and Monsanto toxicity, that pathway.

Tyler: Those de novo mutations.

Victoria: Yes, exactly. So, can we start with trauma?

Tyler: Yeah, absolutely. So, what is trauma? Trauma is when, usually in childhood, when a stressor exceeds your own ability to cope with the stressor. That's why most of it's in childhood.

We know for a fact that a lot of genetics dictate your sensitivity to trauma. That COMT gene I mentioned, it's linked to an increased startle response because of higher adrenaline. I can't watch scary movies.

Victoria: Oh no, me neither.

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Tyler: I've given my wife a bloody nose on accidents. I flinched. It's not the gore, it's the jumpiness. Because my adrenaline spikes so much. Now, imagine that in the context of a young child. Volatile households. Unpredictable caregivers. Or think about PTSD going out to war. Why do only a fraction of people that go to war, and experience the same things, come back with trauma?

The genetics are a factor that people aren't even aware of. So, genes related to stress response are linked to that. Some of that happens. And not all trauma is a one-and-done event. I think a lot of people's trauma, and A- hate to break it to you guys, everyone has trauma. There's no such thing as no trauma. Some people have more severe trauma. It could be an acute major event that rattles the nervous system to a certain threshold.

And then epigenetics come into play. You have these genes get dysregulated. And what's really interesting, virtually every gene that's mutated, that puts you at a higher risk for trauma. It gets further epigenetically dysregulated from trauma.

So, that COMT we mentioned, if it's slower genetically, we're more prone to being scared, we get traumatized, that gene gets turned down epigenetically. You see, now we have even higher adrenaline throughout our lives, which ends up turning into the hypervigilance that people have with trauma.

So, healing from trauma, it's undoing the epigenetic changes that occurred during the trauma. But again, who is switching the genes on and off? Who's dialing them up and down? The methylation system.

Everyone does all the talk therapy... Which I'm a firm believer in the psychotherapy, somatic... I'm a massive believer in all of that. But if your methylation system is heavily mutated, you're swimming against the current. The worker that's supposed to switch the lever and get your body

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epigenetics back to the healthy state, if that worker is genetically hardwired for your entire life to not work as well, why wouldn't you support that first while doing the talk therapy?

And that's what I plan to do in the future, collaborate with psychiatrists and psychologists and mental health workers. I'm not saying that I've helped people with anxiety or depression all the time, get them off of their medications onto natural things with just what I do. And then, you have therapists doing what they do without the supplements. Imagine combining both together. It's magnificent. It's just stacking the cards in your favor.

Why can people talk about their issues to therapists forever, long-term and things don't change? They talk about it, but the cells aren't properly flipping the switch, right? And again, if those workers aren't working as well, you live with that trauma. So, that trauma also sits around the concept of mental health.

When it comes to anxiety, I like to separate it into two things. You have external triggers: My boss yelled at me. My friend's mad at me. My dog is sick. I'm low; these external factors. Now, if there were no external factors, there'd be no anxiety, right? But that's not reality.

Then you have your internal biochemistry. What supplements did you take? But the trauma... The amygdala is the part of the brain for fear processing. The trauma... Let's just say you had a close call, almost got attacked by a dog, or you got attacked by a dog when you were a child and it really scared you.

Maybe you weren't actually going to die. Maybe it wasn't a vicious attack. Maybe you were three years old and the dog kind of knocked you down and was just licking you. Imagine a lick attack from a dog for five minutes straight, and then your parents find you sobbing, unconsolable.

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Or maybe you did almost die. Either/or, a child's brain won't be able to discern between the two. The amygdala, due to these epigenetic changes, when any dog's around you, or if you hear a dog barking as an adult, it triggers you. That's an external trigger, but it's the rose-tinted glasses we all wear based on our traumas.

I want to do this type of deep work with people, but it's a little out of my wheelhouse. That's why I love collaborating with people. Eventually, it's all connected, and there's only so much I can do. I'm focusing on the genetic side right now. But you see how identifying what your external triggers are, are a massive thing that a lot of people aren't aware of.

Then you have the internal side. I've been a biohacker my whole life. I've messed myself up plenty of times; it comes with the territory, of course. But even now, sometimes during the day, my wife will notice, "Hey, are you all right? You seem a little..." And I'm like, "I miscalculated a bit." I took a supplement, this or that; a little miscalculation.

Then, amazing wife... She cares about me... She's like, "Anything I can do to help," this or that? Eventually, I've got to tell her, "Listen, babe, nothing you can do can fix this. It's not an external trigger or thought I need to get out. It is a biochemical internal issue that by tomorrow, we'll be totally back to normal."

But I know the difference because I know the supplements. How many people are crossing their wires and thinking, "My life sucks. My external life is so much more stressful," when it's the six supplements they're on that are jacking up their adrenaline? I try to work with my clients to at least educate about every possible food, supplement, or lifestyle habit that can affect their internal biochemistry.

Victoria: Yeah, I was about to say coffee. I mean, I see this in my patients and clients all day long. We half-jokingly, but with great pain... I was a



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primary provider in New York City... called it the “New York cocktail,” right? Adderall all day, Xanax all evening, with a vodka martini, and then, of course, some sleeping pill.

Tyler: Yeah, so unnecessary.

Victoria: Well, people don't know another way, right?

Tyler: Well, they don't know another way. And I may get some people that might disagree with this, but I personally think... and this is low-balling it... I think 95% of anxiety, depression, sleep, ADHD medications are absolutely not necessary for people. They're guessing. “I'm depressed.” They give me a drug that raises serotonin. Did they even check if the serotonin's low?

Maybe your serotonin is low due to a vitamin D deficiency, due to another genetic mutation, due to a methylation mutation. You're just taking this drug that causes these issues.

So, yeah, the internal versus external anxiety, I try to educate people around that. And even with coffee, you can have mutations in the receptors that caffeine blocks that makes you much more anxious on coffee.

Victoria: Oh, I can't think about coffee too much.

Tyler: Yeah, I do all right on caffeine. I literally weigh my dosage to make sure it's not too much. But TeaCrine, also called theacrine, you may want to try that. It's a xanthine in the same plant family as caffeine, plant-derived. Works similarly, same mechanism, but it is much smoother. Does not raise blood pressure, much less anxiety.

For me personally, it wasn't enough of a kick for me. I like a little kick before the gym. But for people that are very sensitive, that's been a life changer for them. This is what caffeine should feel like.

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So, yeah, all these little things you could really understand, why don't I respond well to that? And I could help show what's a possible alternative for that.

Victoria: Yeah. So, what can the average bear who maybe needs to save up a bit to meet with you or who isn't in the place where they can do the full deep dive, what can they do to start helping themselves? Seems like discontinue all supplements and all drugs and stop everything. Don't do that. I didn't say to do that.

Tyler: I do think allergy testing, food allergy testing can be very important for people. Histamine, people think of histamine, they think of allergies. Histamine can be so much more than that. High histamine lowers serotonin and dopamine production in the brain, linked to anxiety. They use antihistamines for sleep and anxiety medications.

So what does too much histamine do? It can make you anxious. My histamine issues are brain fog, fatigue, lethargy. These are some of the first things I help myself with. And it turns out I was severely allergic to peas and almonds. I ate them every day for lunch at lab. And I was severely allergic to mice. I worked with them every day for six years.

Victoria: Oh, come on.

Tyler: All I got was brain fog, anxiety, lethargy, and wouldn't sleep very well. I wish I got hives, I would have figured it out years ago. So, I'm not saying this happens to everybody, but histamine is excitatory for the brain.

And then it also goes into what foods are high in histamine. Coffee is very high in histamine. I don't do well on coffee. A lot of people, if you drink coffee and don't feel more alert, the histamine... I've seen these memes where it's like coffee raises your heart rate, but doesn't wake you up. You

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know what that means? That means the caffeine is working, but the histamine is going to your brain and masking the cognitive benefits.

Apple cider vinegar; vinegars are very high in histamine. So, I work with people... They start their morning off with apple cider vinegar, which does have gut healing benefits. It does have benefits. I'm here to show the possible negatives and educate you so you can experiment and learn for yourself.

They start their morning off with black coffee and apple cider vinegar. No wonder why you have brain fog. No wonder why you're anxious. And you get rid of those. You switch to a natural caffeine pill. You may feel so much better. Try and think about pickles. I get brain fog right away if I have them. Tomatoes are high in histamine.

I educate, based on the mutations, how bad are the histamine issues. I may tell you, "Let's remove these for the time being." People would be like, "I really love my coffee though." I'm like, "Trust me, let's give it a month. Then you can go back and try these foods." They feel better for many reasons beyond just that. They go back and have the foods and they're like, "You know what, Tyler? You were right. I was just fogging myself up every day."

How can you tell what's triggering you if you're always triggered? How can you tell what's giving you a headache if you always have a headache? If you always have brain fog? So, my job is to help you, through targeted supplements and dietary changes, get you feeling better as soon as possible.

Since we're so targeted, people can feel remarkably better in a week or less at times. Then you can understand; "Now I have the contrast. I feel good now. I did something. I ate something, now I feel bad." You go back and Google. "Oh, Tyler said I was sensitive to salicylates or glutamate."

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What do you know? That food was high glutamate. “Maybe that's what that is.” And they connect the dots for themselves.

But you have to know where the dots are, right? What I do very well is see these dots and see those patterns.

Victoria: Right, pattern recognition. What food allergy testing?

Tyler: So, a lot of people confuse food sensitivity tests for food allergy tests. Food sensitivity tests are more of a gut issue. An allergy test is a body-wide immune system issue. I like skin prick tests or IgE; E as in Eric, not IgG. IgG are for sensitivities. The skin prick test is what showed me about those initial issues for me.

I recommend all my clients get an IgE comprehensive food allergy test. Environmental is cool, but are you really going to move across the country just because of the allergy test? So the food, you can control a lot better. And then again, if we also figure out which gene... Maybe you don't break down histamine in the brain as well. Maybe not in the gut as well. Maybe a certain gene in your mast cells is overactive.

So, these are three different mechanisms that we can support naturally on top of lowering your histamine consumption, lowering the allergic food consumption, that can move the needle so much for people in such a short period of time.

Victoria: Yeah. And what's beautiful about that is, IgE... and I remember “E for emergency”, right? Because those tend to be the anaphylactic ones, right? You can get that through your primary care provider.

Tyler: The issue with that though is I had to go to five different allergists to get my skin prick test.

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Victoria: Really?

Tyler: They told me, “You don't have allergies. You don't have... the eyes... the itching, the sneezing.” I'm looking online, and it's linked to brain fog. I feel like I'm being poisoned at my lab each day. I thought I was being poisoned by chemical fumes.

Turns out I would get to the lab after the gym feeling great, check out my mice, inhale fumes, dump my histamine, go have lunch, eat the foods, dump my histamine. The fifth one, more holistically minded, finally tested me. I came up positive for a lot of things.

And that's what's so frustrating. Because these doctors, these allergists, they're not trained like this. They think, “Either no allergies or you're going to die from anaphylaxis.” That's conventional medicine. You're fine or you're very, very sick.

Victoria: Yeah, of course. How amazing to give people somewhere in between.

Tyler: Yep. That spectrum's huge. And that's why I say what I do is holistic genetic health optimization. I want to optimize your life. I want to help you thrive each and every day, like I think each person deserves to.

Victoria: I agree. Doc, this is all so amazing. And it's just so incredible to be offering people this way to understand the previously un-understandable, right?

What are the take-home messages that you want people, as we close this first conversation... Because we'll definitely be having you back soon... but any take-homes you really want to make sure people get?

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Tyler: I think people should, instead of always wondering what supplement can I add to help things, if you're already taking several supplements, it may be one of the supplements that could be making you feel more stress. Especially if there are supplements that can make you feel good in the short-term, maybe you don't need long-term, that are now overwhelming the body.

And really try to check in with yourself and try to identify, "How do I feel soon after meals?" A lot of my issues were stemming from foods I was eating. I've always treated my body like a temple. I've always eaten clean. It's not about eating clean or processed garbage.

There are so many foods that are healthy for us, that could have certain natural components that individual people may not genetically process as well. So, trying to understand, nothing randomly happens. You don't randomly get brain fog. Something happens.

So, if you ate something that's very healthy, but you notice you have more brain fog, or you feel a little more anxious afterwards, it may be looking into things like, is that thing high in sulfur? Which can release histamine. Histamine is excitatory for the brain. Or is it high in histamine? Or am I allergic to that food? Which will also dump histamine, whether it has high sulfur or not.

Glutamate could be another potential one. And I don't say this to you guys, don't take this as in, "I can never eat any of those things again." That's why we have the genetic testing. Not everyone needs to avoid everything, but trying to figure out, "When do I feel dysregulated?" Could it be food?

Or again, really understanding, "Why am I feeling this way?" Maybe it was a childhood pattern that's repeating again. That's reminding your amygdala, reminding your subconscious, about something bad that happened to you.

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And I'm not saying acknowledging that will instantly vaporize the anxiety, but at least now you can be more cognizant of why this is happening.

You're not getting sicker. You're not dying because you had that. It could be a trigger that happened, and then you ate a high histamine food an hour before that, so it's kind of doubling on top of each other. And you could feel a lot more at ease, maybe not totally fine, but a lot more at ease knowing why your body's responding how it's responding.

Victoria: Amazing. Thank you for putting such a beautiful bow on all of that. Some of the biggest themes we talk about here are living an intentional and authentic life where you're tuned in to you and what's happening in your body, mind, in your spirit, in your world.

And this is a really vital and necessary next layer. When we slow down and pay attention to the minutia of our lives, we create lives. You've been saying that we really want to live, and I really thank you once again for the work you're doing in the world, for being so nerdtastic, spreading the gospel of genetics, and really taking a good look at what's coming into the body and how we're feeling.

So, I know everyone wants to follow you, learn more about you. Where can folks do that?

Tyler: Yeah, so [www.DrTylerPanzner.com](http://www.DrTylerPanzner.com). I'm @drtylerpanzner on Instagram, Facebook, TikTok. And one thing I wanted to offer, too. I want to offer a discount code for your listeners.

Victoria: Oh, wow. Thank you.

Tyler: I want to offer a \$150 discount code that covers the DNA kit to work with me for the Deep Dive Analysis. And for you guys listening now, there are payment plan options available. But I'm also just getting started. I'm

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really looking forward to having lots of different tiered type ways that I could transfer some of this knowledge to you.

So, if that deep dive isn't in full line with you right now, there are so much more great things on the way. But what would you want that code to be?

Victoria: Let's do "Feminist Wellness". Amazing. Thank you so much for offering that. I was not expecting it.

Tyler: Yeah, absolutely.

Victoria: I would highly recommend it. Took me three months to get my raw data back from the massive corporation that I used unwittingly in 2014; not realizing what a privacy and security nightmare they are. We're not going to name names, but it might be some letters and numbers together; that are the number of codes and genes in your... Anyway, nobody needs to get sued.

But in hindsight, I would just do Tyler's genetic profile; way more better. And I have no financial connection to Tyler. I just think he's dope. So, I'm just saying that.

Tyler: I appreciate that.

Victoria: Yeah, yeah, yeah. For sure. Thanks again, Doc. Really appreciate it.

Tyler: Yeah. And just to reiterate, "Feminist Wellness" on my website. You guys, checking out it's \$150 off of that, and really hope you guys got some great knowledge and value out of this. And I hope you all have a great rest of your day.



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My nerds, that was so amazing. I learned so much talking with Dr. Panzner. We had such a blast, as I'm sure you could tell. And I promised at the top of the show that I would share with you where you can download a video of him reading my genetics.

It was mind blowing and incredible. And like I said, it's been about three months and I feel way better in several really key ways. I'm so grateful. So, I'm excited to get labs again; three months, at six months, and a year. And to just really keep being present to how I feel on his supplement regimen and off. I was taking a number of things that were really making me feel worse.

So, if you want to hear him geeking out on my genetics, head on over to [VictoriAlbina.com/286](http://VictoriAlbina.com/286), which is the episode number, and you can download this whole video of him talking all about my COMT, my SUOX, and so many interesting genetic mutations, and what to avoid taking, what to take. It's brilliant.

I really like his low supplement approach. I think it is phenomenal, as someone who definitely put myself on way too many supplements in the past. Yeah, this is a really nice new framework for looking at health care and looking at really individualized personal care.

So, anyway, I could clearly nerd out about this for hours, but I shan't. Go forth, download that talk, that video. Let me know what you think of it. If you enjoyed it, share with the good people and be well. Thanks for listening.

Let's do what we do. Gentle hand on your heart should you feel so moved. And remember, you are safe, you are held, you are loved. And when one of us heals, we help heal the world. Be well, my beauty, and I'll talk to you soon. Ciao.

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Thank you for listening to this episode of *Feminist Wellness*. If you want to learn more all about somatics, what the heck that word means, and why it matters for your life, head on over to [VictoriaAlbina.com/somaticswebinar](https://VictoriaAlbina.com/somaticswebinar) for a free webinar all about it. Have a beautiful day, my darling, and I'll see you next week. Ciao.