



Episode 453: Dr Tami Meraglia and Ian Mitchell on
a Holistic Approach to Hair Loss
(with Extreme Results)

Child: Welcome to my Mommy's podcast.

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Katie: Hello, and welcome to the "Wellness Mama" podcast. I'm Katie from wellnessmama.com and wellnesse.com. And this episode is all about a holistic approach to hair loss. And it takes a really unique angle that I have not seen addressed before. I'm here with two people I admire very much and consider incredibly, incredibly smart. The first is Ian Mitchell, who has formulated many products, including several that are very much a part of my daily life now and has also formulated this hair remedy that addresses hair loss in a way that I've never seen before and with pretty extreme results. And I'm also here with Dr. Tami, who is the author of "The Hormone Secret." She is a physician, and a mom, and has specialized in both cosmetic medicine and now in stem cell medicine. She's incredibly smart and really helps people address the underlying cause of all kinds of problems. She likes to say that fine is a four-letter word when people ask how you are and she really strives to help people find limitless energy and health. And I'm really excited to share her with you today. So, without further ado, let's jump in and understand hair loss.

So, in this episode, we are tackling a topic that I think is really important I have not tackled on here yet, which is the topic of hair loss. We know this affects a lot of women and a lot of men, certainly. It's something that people in my life have struggled with. And I feel like there's a lot of misinformation when it comes to hair loss and a lot of treatments that seem potentially dangerous, or at least not effective. And so, I'm really excited today to really delve into the roots of hair loss and also talk about some solutions that can be really effective. And I'm here with Ian Mitchell and Dr. Tami who I'm getting to see in person after not seeing her for years,

such a treat, and two of the best people I can think of in the world to talk about this today. So, to start broad like we usually do, I wanna go into, kind of, what's going on physiologically in the body when we're seeing hair loss. Is it single cause? Is it multi-cause? What are some of those, to use the pun, roots that are going on in the body when we're talking about hair loss?

Ian: Okay. So actually, I think I can jump in with a portion of that because we've looked at it from a lot of different approaches in say, with men, typically, everyone looks at dihydrotestosterone and 5-alpha-reductase, and the ratios and the balances there. But that's actually kind of, as it turns out, more of a tertiary function. It's not really even the secondary cause. And it's definitely related. And you can see how those things correlate. But correlation, as we know, does not always equal causation. And so our approach has been to look at what we thought would be the root again, to use the pun, the root cause of the issue. And, you know, I always say this, but it's that Henry David Thoreau quote, if you know it, "For every thousand hacking at the branches of evil, there's one hacking at the root." That's who you wanna be is addressing what's really going to elicit the largest response with the minimal effort so you can get the biggest yield for people.

So, what we're looking at is how do we up-regulate intracellular function? Because the body wants to do what it's designed to do, right? And follicular cells are no different. If you provide them with the resources, they don't want to be in an intelligent or catagen phase. They, you know, want to be in an antigen growth cycle, pumping out hair. That's what they're designed to do. And so, we've looked at how to do that and come up with what I would say is classed more as a holistic approach but in reality, the science just is very good and it's looking at the blend of detoxification pathways and how you can stimulate upregulation of ATP while you're down-regulating cytokine responses so that you create the most conducive environment towards promoting the growth. And so, it wasn't...you know, you were asking, is it one single point? It's not. Like with anything in the body, it's, you know, multivariate, multifunctional systems.

And so, we had to address a whole host of different things to overcome the issue. And I'd say actually, we've done a surprisingly good job of doing that. But again, we had to look at it in terms of chemical pathways, detoxification pathways, photonic upregulation using lights at specific frequencies to stimulate cytochrome. And there's a litany of really good studies. I think what we've done is combine all of the best components together in one system, you know, to get the issue dealt with and fixed up and pretty well. And Tami, I think you can probably elucidate things in terms of, you know, the biological components of the different cycles. So have at it.

Dr. Tami: Well, you know, hair loss affects everybody differently but I think that we underestimate how much it affects the people that are getting affected. Over 50% of women over the age of 45 have hair loss. And I know you know who you are. Your ponytail holder goes around four times now instead of two or three. And men actually can have hair loss as early as their 20s. And it definitely is a multifactorial thing. We do have hormones involved. We have nutrition. We have circulation. We have detoxification. We have energy of the actual cell. And so there's a lot of treatments, over the counter and prescriptive, but I don't know any of them...And I'm an MD and so I'm gonna look at it medically no matter if it's over the counter or a prescription. I don't know of any "treatment" that doesn't have a host of potentially really scary side effects. You know,

things like disrupting your whole hormone pathways in men and women, making your whole system shut down with regard to libido. There's so many. I could go on and on and on, and even the topical ones are having these side effects as well.

Then we have people who are just like, "Well, I'm just not gonna shower as much," or, "I'm just not gonna brush my hair as much." Well, what you're really doing is you're just not allowing the hairs that are already dislodged from the follicle to fall out, you are not saving any hairs by not showering. You're not saving any hairs by not brushing. There's actually four stages of hair growth. There's three that are popular, but there's actually a...popularly talked about, but there's a fourth one. There's the antigen phase, which is the active growth phase. And that's the one where your hairs are most susceptible to hair loss from like laser hair removal, but also they're going to grow more. So, any treatment that you have, and if you're using the system that we're talking about, then you're going to have to use it for enough time for the hairs to go through all the phases because not all of your hairs are in the antigen phase at one time. If they were, then they'd all be in the exigent phase, which is the falling out phase.

And then we'd be like Phoenix, right? We'd molt. That wouldn't work. So, there's the antigen phase. And then you go to the catagen phase, which is this resting transitional phase where your hairs have stopped their active growth, but they're getting ready and they haven't fallen out yet. And then you have the telogen phase where that's actually where it's dislodging. And then the exigent phase is when it actually falls out. And that's all you're doing is you're just helping the exigent phase when you're brushing. But I want you to know that circulation is really important. You do need to have circulation as one of the many factors that will help your hair grow. So, we have a system that has a derma roller because it increases the blood flow to your scalp. And that's super important. Not only does that help your whole system...Even if you just did that, that would be beneficial. But it also will help the serum because more blood flow helps the circulation and helps it get it into the scalp more often and more frequently and penetrate better.

Katie: And I think for people listening when it comes to hair loss or hair growth and maybe understanding these hair cycles, one example that might come to mind for them is pregnancy. Because I know having had kids myself, it seems like during pregnancy, my hair would get really, really thick. So I'm guessing there's a difference in the cycles or something's happening there. And then a lot of women experience postpartum hair loss. So can you explain what's going on or what changes during pregnancy and any way that that can be applicable to our understanding of stopping hair loss?

Dr. Tami: That's a hormone base. So, when you have your pregnancy, you have a high level of progesterone and your estrogen are stable, and it's not fluctuating up and down. So your hairs kind of get stuck into this wonderful full and nothing's falling out. But then you have your baby and everything flows. And usually, women start to notice that their hair really changes when their periods start coming back. You can see after pregnancy that your hair does start to fall out right after the baby because that's when your hormones go down. And hormones are part of hair loss in men and women. And so we want to make sure that when you're going to evaluate hair loss, we want to know a little bit about it. We want to educate you. When you opt-in to get something that is going to help you grow your hair, you should also be given some education about all the

various aspects, and hormones should be one of them. Nutrition should be another one, like I said, circulation, and then the ATP and the mitochondria and getting the energy so that your cells can actually make new hair.

Ian: So, there are a couple of interesting hacks that we've looked at. So we've broken things down in terms of the kits of how to do it as fast, faster, and fastest. And fastest is kind of funny to me because you use photonics. And so, basically what happens is you take LEDs, and LEDs at around 670-nanometer bandwidth will affect the cell cycle. And so they photonically stimulate the cell cycle. They hit a thing called cytochrome and then they bump nitric oxide out of the way and replace it with a nice oxygen. And so it's effectively forcibly moving the oxidative phosphorylation, the electron transport chain through. And so you end up with higher rapidity in the growth cycle. So it appears that it's actually going really fast. But basically what you're doing is you're overclocking your intrinsic cellular growth cycle. And so, when you combine that with some of the other things that we're doing, like the scalp mask, which it's a once-a-week process where you detoxify the follicles.

So, we're thinking if you approach it from the outside and you remove all the things like, you know, the parabens and the different stuff that you're actually additively placing when you wash your hair and you clean and you put products in it, when you remove that, a lot of the growth gets suppressed just because you're inhibiting your body's normal cycles, right? It's going to produce things, oil is going to come out. But if you inhibit that with a lot of chemical additives, you have both the chemical stress in addition to actually mechanical stress placed on it by not having proper viscosity in various small areas like follicles. And little changes like that are additive. And in the fastest setup, we use the photonics to try and trigger the cycle so that it bumps up the pace. So it has the appearance...and I'm sure we can give you some pictures you can post. But when people see it, they think, "Well, that's not possible. You can't grow hair that rapidly." Yeah, actually, you can, it's just artificially stimulating the cell cycle to process through. And so it has the net effect of upregulating ATP production, dropping the cell cycle times. And so, at the end of the day, you look like you have a lot more hair than you should have in a much shorter period, as is evidenced by, you know, the pictures. And, admittedly, it's a little surprising.

But when you approach it systemically and say, "Okay, we've gotta take out the chemical stress so we can clean the environment so that the cells can actually do it." We did a bunch of things using different minerals to detoxify the system and also to block oxidative stress inside the cells. And the net effect of that, it's very similar to some other projects I'd worked on where we started looking at sub-cellular constraints in terms of ATP production. And we figured oh, well, we can not really add energy into the system like we're doing with photons, we just can simply keep it from losing the energy that it inherently has. So you just make the body function more effectively by blocking system loss. So when you block the loss and you add in extra energy, you end up with a net effect where everything is moving so much more rapidly that it looks like this, kind of, magical twist but it's really not. It's just, kind of, synergistic additive effects of different stimulation.

Katie: I love that you guys touch on the detoxification aspect because this was actually something I went really deep on when researching for our haircare products, realizing we know as women we're exposed to a lot of chemicals through personal care products. And a vast majority of those are haircare products. And it's, kind of,

a perfect storm because we're stripping our natural oils with a lot of these really harsh detergents. And then many women are spraying aerosols, and parabens, and plastics directly on our hair and our scalp. And then it's a constant level of exposure, our scalp is exposed to these all day, every day. And those do build up we're now understanding. And so, I was excited to address that from the haircare aspect. But that alone isn't going to reverse the hair loss issues. That was why I was so excited to really delve into this with you guys. And I think there's so many directions to go from here.

But I love that you brought up, Tami, the nutrition side and the hormone side as well. And I know it's very much a both/and conversation. But I think it's also important to talk about that side a little bit to kind of get the holistic understanding of that because often online, I see sources just talking about, "Oh, just take biotin and that'll fix it." And that makes me nervous with my background in genetic research because when you take especially an isolated vitamin like that in megadoses, it can throw a lot of other things out of balance, or in some people, there are genes that respond really negatively to excess biotin. And that seems to be the mainstream hair loss advice. So can you, kind of, give us a primer on the hormone side and the nutrition side?

Dr. Tami: Absolutely. And just one little tidbit on the detox side as well. You know, there's hair care products that are clean and they'll remove all of that junk from your hair. But we forget that those chemicals actually enter into the cells of your scalp and into the follicles. And so that you actually need to detox your cells. And so it's almost like that you do need to have a mask or some kind of a serum that pulls out the chemicals that have been stored or leached into your cells. So, just remember, clean hair is not detoxed hair.

So, I love hormones. My favorite hormone for women is testosterone because nobody ever thinks about it. They don't talk about it and we need it, and a little tiny bit has an outsized role in how we look, feel, and function. But testosterone isn't the end of our hormone story. Testosterone can become other things and it can become estrogen, it can become dihydrotestosterone, and it can become other estrogens.

And the wonderful thing about hormone cascade is that it's like going from one step to another step that is a key is required for that step to happen. And the key is normally a vitamin or a mineral. They're called coenzymes. But the problem is, is that if you just start randomly taking things, like Katie was saying, that you don't know if you have that missing coenzyme. And you can actually change the entire biochemical direction in the opposite way if you add something that you don't need. So, there are a few things that you should look for, I'm not telling you to take them, but you should look for, do you have iron deficiency? That's a big one. And people always say to me, "Oh, I eat well. I eat clean. I eat organic. I eat whatever." Does that mean you're absorbing it? And so that's a really big issue for us to know and for you to know. And stomach acid is super important for you to absorb iron. Iron is absorbed in an acidic environment. And if you take antacids of any kind, there's a chance that you have a mild iron deficiency. So, learning about how your body absorbs things, I think nutritionally is the biggest part of the story, rather than trying to just take one or two supplements.

Katie: And then when it comes to the mainstream, kind of, more well-known hair treatments that are being used right now...So I've seen some that are topical, I've seen commercials, at least. I mentioned people take a

lot of biotin, way too much usually. With these systems, what's actually happening or how are they trying to address hair loss? And maybe give us some of, like, the risk-benefit analysis there and why those aren't necessarily good in the long-term.

Dr. Tami: For sure. Well, the topical are actually medications. You know, there's a brand name called Rogaine and it's an actual medication that's used topically. And it inhibits the enzyme...5 alpha-reductase is actually living in your hair follicle and it actually is involved in hair loss through the production of DHT, and it inhibits it at the follicular levels. So, it is effective. But just like your skincare has to be looked at as if something that is gonna be absorbed into your body, your scalp is also going to get absorbed into your body. And so, those medications have been known to have a host of hormonal disruption. And so, why would you do that when there's natural alternatives? There's also things that you can take orally, Propecia and things like that, that again can be very effective, but it is going to disrupt your hormones. Anything that you ingest that's supposed to disrupt your hormones is definitely gonna have a downward effect on your whole hormone tree, not just that one that you want.

So, every single thing that's on the market has an increased risk and some of them are not even approved for women and you don't even know that. If you're going to try some of these products, I challenge you to take out the package insert and read those tiny, tiny, tiny little words. You can take a picture of it with your phone if you need to blow it up and actually read it because they don't want you to read it because the side effects are scary, and they're long-term as well. Sometimes they don't go away just because you stop using it.

Katie: And there's obviously some hormonal differences between men and women. And Ian you touched on this a little bit as far as...So I'm curious how this is...and you talked in broad terms, but is it effective on both men and women? Because I think that's a big key. We're seeing, like you mentioned, these products that were mainly geared towards men but women are now using them too as we see more and more hair loss in women. We're seeing like they have side effects that are not safe, especially if women are looking for postpartum hair loss remedies. But because I would guess there are, kind of, maybe different pathways, different things happening in men versus women, can you, kind of, walk us through what's happening in those different cases and how it's addressing both?

Ian: Yeah, so we actually have everything set up, and it's bifurcated between men and women. So, we have two different setups. Case in point, we're actually doing an IRB trial for COVID long haulers because 65%, actually the status is a little over 65% of all the people who are having long haul issues are reporting hair loss, and that's anything over 100 strands a day. So, noticeable, noticeable sizes. But what's intriguing is there seems to be a preponderance of women. And when you start to look at that, and obviously, no one knows for certain and the data is definitely coming in as people do more and more research, but one of the things that is glaringly apparent is that, like Tami was just alluding to, things on your scalp are related to everything in your body because it transfers through. And, you know, hence like finasteride, you have issues with hormonal dysregulation for men that can literally cause chemical castration and a whole host of other not-so-fun things that...You know, literally, that's one of the reasons I would never even approach that is just because the cost-benefit analysis is very skewed in one direction and it's not a positive one in my opinion.

But when you look at what's going on with the preponderance of the people who are losing hair being female, you start to...or at least I did, I started to think, "Well, why is this?" And so, in our discussions, we were looking at it and one of the critical features is that because it's a hormonal function in part, you have to look at what's driving that, the communication between your endocrine system. And with women, there's a much higher density of mitochondria in their ovaries, right? And it's part of the reproductive system. It's very much hormonally linked, right? And so COVID long haulers, there's a mitochondrial dysregulation that occurs. And so, the ovaries have roughly 100,000 mitochondria per cell. And the next is 5,000 in the heart.

So, in terms of mitochondrial density, you're looking at, in a woman, it's ovaries, heart, brain, eyes. And in a man, it's heart, brain, eyes. And you're seeing like in the German studies on long haulers that there were post-COVID patients who had dysregulation in men, their heart function in over 85% of the cases. So, it's not a real far stretch to say, well, there's obviously this cascaded mitochondrial dysregulation happening and it's also affecting the systems of communication in terms of just hormonal balance with the endocrine system. So, how do we contend with that? So, we started looking at how do we balance out the hormones? And hence the additional supplements that are for men are different than the additional supplements that are for women. So we can address and, kind of, again, hit at the cause, you know, and look at the highest leverage points, which in this case really do seem to be a drop in systemic communication because of dysregulation in the reproductive system and as it links to the endocrine system.

Dr. Tami: The other hormone that's super important for hair growth and hair loss is cortisol. High levels of stress have been known to have not only your hair not grow but also cause hair loss. We see that after illness. We see that after COVID. We see that even just when you're stressed out.

Ian: Presidency.

Dr. Tami: Yes, you can look at the president. One of the things that we know is that cortisol at high sustained levels, we just weren't designed for that, right? Your adrenal glands are these tiny little walnut-sized glands that sit on top of your kidneys and they're there to help you run away from a bear. That probably should have lasted about two minutes. And by that time, you either have gotten away or you were eaten. We were not designed to sustain this. And so when you have a stress that your body perceives as a bear, but is actually just your boss, your deadline, your family, your stress, your inbox, your traffic, your home, all of these things keep your cortisol levels up. That does two things.

One is it increases the hormones and chemicals in your body that break things down. You'll probably notice that your skin doesn't look as good either because your collagen is breaking down. Collagen is part of your hair. So, the things that are breaking down go faster. And then the things that build, build new collagen, build your skin, build your hair, they're not being made because the adrenal glands are busy with cortisol. So, not only is it the hormones of being a man or a female, it's also the hormone of stress cortisol.

Katie: That's such an important point. And I've talked before about this kind of in a varied approach in that a lot of people, I think, just think of stress in terms of "I feel stressed" and that exact trigger. But our bodies, like you mentioned, perceive stress and have that response from a variety of things. And it could be the incorrect type of light at the wrong time of day. It could be your job, your boss, just traffic, whatever it is, or it could be things like even low-level chemical exposure. We have so many more inputs when it comes to cortisol I feel like right now in society, certainly COVID, and lockdown, and all the things we've been through in the past year, it's obvious to see stress and how that's affecting all of us. And so, I think that's such a good point, too, is like addressing all of those.

My personal experience being that, I didn't even realize, I had low-level stress for many years due to past trauma. And I ignored that for a really long time and just focused on what I was eating and the supplements, and figured that would fix it. And it really wasn't until I addressed that and realized I probably was not in parasympathetic very much for an extremely long time and saw firsthand what a difference that made because all the health problems I thought I was gonna fix with all of these other supplements and crazy protocols all resolved themselves when I dealt with the underlying stress. And so I think cortisol is a huge key. And I just like to remind people, it's not just about feeling stressed. You also have to look at things that your body is perceiving as stress, even if you don't necessarily feel the emotion of stress.

Dr. Tami: I always tell my patients that your adrenal glands don't know the difference between a wedding and a funeral. They're stressful. And so, it doesn't matter what you feel. Just like you were saying, Katie, it really doesn't. The other thing about stress is I think that it is such a disservice that we as medical doctors will have patients who come to us now more than ever talking about stress and then we'll tell them how to...we suggest to decrease their stress. Really? That's so lame. And then how about my other favorite, manage your stress? What does that even mean, manage your stress? Your 5-year-old cannot get their dinner, your boss is still a jerk, your project is still due tomorrow. There's still so much going on.

So what I have come up with is...this is my own little, sort of, story about stress. Stress happens. Stress is like eating. And we eat and food gets all over our teeth. And if it stays there, it causes cavities and gum disease. It can actually cause heart disease. The bacteria from the gums can go down to the...it can cause complete havoc on your whole body. So what do we do? We brush and floss, right? How often? At least once a day. Oftentimes more than that. Why? Because you can't stop eating. It's the exact same with stress. Stress is not going away. It's just like the food on your teeth. But we have to brush and floss our cells from the stress each day. And the best way that I know is meditation, not medication but meditation. And there's a plethora of research that supports that it decreases the hormones and chemicals of stress.

Katie: That's such a great analogy. I love that. I'm gonna use that again, for sure. I'll quote you for sure. And I love that you guys are taking the holistic approach to this. I think there's a couple of more areas we need to go deep on because it's fascinating to me. And you mentioned photons and you mentioned I think enzymes and minerals and a lot of things that are probably not being included in the mainstream conversation about hair

loss. And I know that you guys, knowing both of you have tested this really rigorously and you've seen incredible results across the board. So I would love for you to, kind of, talk about how you pulled in all those components and what they're specifically doing to the body that's causing these extreme results.

Ian: Okay. So, looking from the sub-cellular components first. So, we're using specific minerals to block oxidative stress at the inner mitochondrial membrane. And so the net effect of that component is that it up-regulates ATP production. Now, as I alluded to earlier, it's not actually adding an ATP. It's just keeping you from losing it. So you have more electrons to actually put into the system. So your electron transport chain kicks out more units of energy. And it relates to, like, the long haulers because those guys are effectively having a symptom called the Warburg effect. And basically what that means is that your body gets shunted into glycolysis inside the cells. And so you get 2 units of energy out in lieu of 36. So, you're at a huge loss. And the net effect for hair is the follicles just can't produce the way they would. So, in those cells, by virtue of upregulating the surrounding cells, you end up with a benefit. So, we're using minerals to do that in a specific blend, to take care of one component.

Then we've looked at how to stimulate growth factors and get the cells to trigger their own growth factors. And we're doing that through groupings of very specific groupings of amino acids. And when you collect those and you drop them in, there are certain affinities inside the cell that will bind with different types of amino acids. And it up-regulates the cell function. And so, in another component, that's an additive cycle. And then you start looking at the other side of the wave because, you know, if you want something to increase in strength, you adjust its amplitude. And so you have to look at the top side and the bottom side. So, the bottom side in this scenario is detox pathways. So, again, with that, we're using combinations of natural compounds, a few minerals, you know, the standard stuff that people would see, but then a couple of non-standard holistic components that are a little bit more esoteric that people don't generally play with because we wanted to be able to pull out toxins.

And that's critical because you can only reconstruct something if you have an environment to reconstruct. It would, like, be akin to building a house and never ever taking away the debris as you build the house. You know, at a certain point, you just simply can't repair it because there are too many impediments in your way. So, once a week, we do a full deep scalp detox. And then every time you apply the serum, there's a minor intracellular detox function that occurs. So you've got, kind of, the macroscopic approach with the follicular cell detox on the surface and then you've got the microscopic approach with the intracellular detox. And then we've used different lipid chains, which are just, you know, the fancy science word for fats, different lipid chains to stimulate the cells and to provide the base for some of the energetic components to actually bind and then to drop into the energy production cycle.

So, it's just looking at the totality of how do you amp up the positives? How do you diminish the negatives? And then how do you, more importantly, create a total environment so that everything can do what it's supposed to do? Because, again, we're going back to the body knows what it's supposed to do. It just needs the impediments taken out of its way. And then we do a couple of extra hacks, like the photonics stuff. And that's actually...There's a tremendous body of research on low-level laser therapy. And some of the best

research I read when we were doing this came out of Harvard. And there's a litany of it, and I would recommend that anybody read it because you have to in our system, you balance it out. You'll do, you know, photonic stimulation for 10 days, and then you'll take 7 days off. And the reason for that is, the technical term is a biphasic dose-response curve, which basically means that when you go beyond a certain point, it doesn't have a beneficial effect, it has a detrimental effect. So, you can build up the response in the cell cycle by overclocking it for roughly 10 to 13 days. But then when you go beyond that point, it drops down and actually goes to a lower state energetically than it was prior to starting.

So, when you're using a thing called a Janus mediator, which is what this triggers, and it's Janus from the Greek god of two faces, right? And so the biphasic component allows us to really amp things up. But then you have to go through a period of integration where you reset. And like anything else, you wouldn't work out every day of the week, seven days a week as hard as you could because you might end up with something like rhabdomyolysis. So, not that that would ever happen because only people who have never heard of it end up with rhabdomyolysis. That said, so you can stimulate it but you have to allow your body time to integrate. So, we have a program that's lined out so that you'll do 10 days on where you overclock the cell cycle and then you drop out for 7 days so that it resets and goes back to its original position. And then once it's at stasis again, then you begin the overclocking. And we map that out over time to see what the best response was and that's what tested out the best.

So, the combination of those and then the additional supplements. So you've got the scalp masking so you can detox. You've got the serum that you use to do the intracellular detox and upregulation of cell function. And then you've got the photonic stimulation, and then you also have the supplement component that are balanced for men and women so that you can address the hormonal components. And also circulation and, you know, do the derma rolling because there's a whole host of benefits to stimulating the circulation up there because generally, your scalp doesn't have a ton of it. But in addition to that, it's also doing collagenases because you're creating micro-fissures in the cells and around your scalp. And so, the net effect is your body tries to repair it. And the things that we included to stimulate the growth factors also trigger the growth there. So it's, again, an additive effect one on top of the other. Tami.

Dr. Tami: The other part of it, you know, I used to practice exclusively as a cosmetic surgeon, or a cosmetic physician rather, non-surgical, and then moved into stem cell therapy. So this is super fun to go back into the cosmetic, but I can tell you that one of the things that I made sure that I did is I would smell, touch, and feel everything that I recommended for my patients. And I can tell you that all of this is luxurious. The serum is this gorgeous purple. And it's naturally like that. It does not stink because you are not going to go put stinky stuff on your hair no matter if it works or not. And it feels good. The derma roller does not hurt. You don't need to worry about it. So not only is this going to work. It's going to be a pleasant experience. And so that's really important if you're going to do something that's gonna work, I think that it shouldn't be, like, grit your teeth, and plug your nose, and suck it up. And that's why we came up with this system, instead of it just being a one-off product.

Katie: That's a great point. I'm glad you brought that up because certainly, we see that a lot in the health world. There's a lot of things that are really beneficial and people are just not going to do them because it's a bad experience. Well, like, an example that comes to mind, a friend of mine, who you guys actually know as well now, eats raw liver all the time for the iron. And I have started doing this as well. I'll just swallow a bunch of raw liver in the morning with just water. It doesn't taste that great, but it's extremely effective for energy. And most people I mention that to will never, never, never try it because it's not a pleasant experience.

But I think to circle back to a couple of things you mentioned, Ian, I think that were really important to highlight. The first being that sometimes the most beneficial thing is subtractive. But that's what the detox part is important. And often, I think we get caught up in the additive and we wanna just keep doing more and more things. And we don't address that side as much. And also that dose-dependent response that more is not always better and cycling. I've talked about that so much and even I say I don't do anything every day, whether it supplements, whether it's exercise. The body is extremely adaptive but you don't wanna do everything every single day. So I love that you brought up both of those points. I know that we're going to get the question from a lot of listeners about safety during pregnancy and nursing. We have a lot of moms that listen. And as we already talked about, hair loss is a common thing that can go along with those phases of life. So, can you give any specific guidance for moms who are pregnant and nursing?

Ian: Well, as I'm not a medical doctor, nor do I play one on TV, I'll take the first crack at this. Yeah, based on the components that we've included in everything...And there was a process of going through and looking at other things, some of which worked incredibly well. But at the end of the day, the idea was to have the most holistic process so that there wasn't anything that you would end up being damaged by or ran the risk of having problems with. And everybody, kind of, shies away from it. But personally speaking, if if you wanted to actually eat this compound, it wouldn't be detrimental. It would be incredibly beneficial for you. And you could also likewise use it topically with great benefit. So, really in terms of, though it's not terribly popular to say, you know, people who are pregnant or nursing...One, I'm not intending to diagnose, treat, or prevent any condition with this. But yeah, it would be perfectly fine and safe. There's not anything inherent in any of the compounds that would throw something out of kilter. It's kind of beneficial all the way around.

Dr. Tami: And I think the other thing to remember is, you know, when I look at something as an MD, I don't go by just is it FDA approved or FDA says it's safe or not. So, then I do my own analysis and go, "Okay, well, what is this made of? So would this disrupt hormones?" Of course, that would be the most important thing in pregnancy. The answer is no. It's just a series of amino acids and things. So, in theory, you could think of this as the same way as an avocado face mask. It is natural substances that are put topically so that there is not going to be any harm for pregnancy or breastfeeding.

Katie: I'd love to talk a little bit more about how quickly it works because I know I've seen some pretty amazing results in people I know personally. And I know you guys both personally. So I've gotten, kind of, some insider information here. But I think most people have the perception that hair loss is a very long process to solve because the hair growth process is so slow. And I know you guys have tried this in a lot of different types of cases. So, what are you seeing as far as results and, kind of, timeline?

Dr. Tami: So, Ian sent me the photos and I'm like, "Yeah, we can't say this." We cannot say that that there's this much hair growth in four weeks because it doesn't make sense. It doesn't make sense. It doesn't follow my medical textbook knowledge about how long it takes to grow hair and the cycles. And then he reminded me that of course it isn't following the same cycles. That's the whole point of the properties of this serum. It's up-leveling the cycles. So, as crazy as it sounds, it is four weeks. We will see significant hair growth in four weeks. I keep saying, "No, no, no, no, don't say that. Say 12 weeks." But I keep seeing these pictures at four weeks and it's undeniable.

Ian: Yeah, part of that is biohacking, right? We're coming up with a different way to elicit a very specific response. And in this case, it was just the parameters were this. And so, you know, make the hair grow as rapidly as you can, make it as healthy as you can, and make the process very elegant. And it does it well. And yeah, we've gone back and forth about this but you shouldn't have to overcome the disbelief of things and just let people talk about it themselves. That's, I think, actually the best thing in terms of something like this where there's definitely going to be some reluctance to accept that things can happen more rapidly than they normally would happen in a biological setting. But if you change the constraints, and in this case, you know, we're doing the rapidity with photonics. So it's not...

I mean, just read the Harvard research. It's there. No one had ever grouped it together with a system of components that would do all of this, but the individual components were there. It's kind of akin to walking in a room with all of the parts for a bicycle. And most people might look at it and go, "Well, it's just a bunch of strange sprockets and wheels." But if you know what it's supposed to look like, and you assemble it in the right fashion, then you have this thing that does all these crazy things and it accelerates your speed. And that's basically it. So, it was a whole host of disparate things that hadn't been addressed before. But yeah. And, you know, in under a month, you'll see a profound difference. And that's the way it should work. Right? You know, better science.

I mean, I guarantee, 100 years from now, assuming, you know, the wheels are still on the buses of society and we're moving forward collectively as a species, this will seem archaic and slow. And there will probably be some sort of thing where, oh, my God, it took two hours, really? It should have only taken 20 minutes. You know, so this will seem, you know, slow by contrast, but right now, it just happens to be...for, you know, the temporal point we're at right now, this is probably the best thing I've seen, and by far and away the fastest, and also natural and won't hurt you, which is...And Tami probably would have beaten me with a stick if I had proposed to do it with any, sort of, oddball compound that had strange side effects. You know, this will do it but they'll be radioactive for three days. That was taken off of the table. Its secret ingredient is thorium. Yeah, that probably wouldn't have rolled well.

But yeah, it's just that, it's better science and better medicine just put together, you know, in a system. And again, because we've all talked about this, you can't address how to heal the body well unless you address the body in all of its different component systems because it's not just one thing. You can't pop a pill, you can't

just smear a serum on. That will not work. And if you can trick the body, you know, ala finasteride, to block something, you know, in a follicular path so it's not doing what it's supposed to do, yeah, you can do that. But unfortunately, there's a consequence to that. You know, I mean, this moves in accord. It's kind of like the aikido version of things. We're using the body's energy with it in lieu of trying to hit it in a detrimental fashion.

So yeah, it's faster and better. It's the Buckminster Fuller ephemeralization, you know, faster, better, smarter, cheaper. And hopefully, that will, you know, get some sort of shift in the marketplace that other people see this and go, "Oh, there's a better way to do it." Because I guarantee, we won't be the only people that...we might be the first people that have figured this out, but hopefully, we won't be the only people that figure it out. It should elicit a change across the market where people go, "Oh, well, look at this. These guys are making a way of doing it the right way. We should do the same thing." And ultimately, I mean, I know the three of us, what we're all trying to do is move the needle. So...

Katie: And this is a question I did not think to ask you guys ahead of time. So if the answer is that you don't know yet or that you can't talk about it, I totally understand that. But does this work anywhere that there are hair follicles? I'm thinking specifically for there's a lot of people listening who have thyroid issues, and I used to have Hashimoto's. There can be hair loss at the eyebrows and even eyelashes with thyroid issues. I know this is maybe probably not geared towards use by the eyes. So maybe you answer this from the perspective of is it okay to use near the eyes and/or could it potentially be beneficial there as well?

Dr. Tami: Yay, I'm so glad you asked. The answer is yes. And we even have a charity nonprofit where people who go through chemotherapy lose their eyelashes and eyebrows, and this can be applied safely and it can help grow back your follicles. Absolutely.

Ian: Yeah, that was, again, going back to the idea of being safe across the board, also facial hair. And that's another really good one that I think it's more of a cosmetic thing but a lot of people that have patchy beards and things like that will want to use the same system there. One of the other questions that a lot of people who prior to testing it asked was, is this going to grow hair in places where I don't have hair? No, it won't. It will stimulate collagen but it's not going to stimulate new hair in strange spots where you don't have it.

Katie: That's funny.

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I guess a little bit of a deviation but since I have you both here and people might ask this question as a follow-up. You mentioned the growth cycles of hair and I think laser hair removal, and I'm curious...I've gotten a decent amount of questions about that and if it's safe lately. And I don't know offhand the data on laser hair removal and if it's safe. It seems like it's using a different...It's probably doing kind of the opposite almost of what this is. It's using those in a nonbeneficial way from the hair follicle perspective versus a beneficial way. But just any thoughts? I know, it's a deviation on the safety of laser hair removal.

Dr. Tami: No worries. I'm probably uniquely able to answer this because I just sold my medical spa that I owned for 13 years where we had two different lasers that were used for hair removal. And they are safe. Now, they're not safe for you in pregnancy. Why? Because they haven't been tested. And light frequency can potentially, you know, go penetrate where we don't want it to. But for regular people, it is using light and it actually goes down and it's a heat thing. And there's actually a hair bulb and a hair bulge way, way, way down. And if you've ever gotten your hair waxed and, you know, you looked at it, and there's that like waxy little bulb at the end, that's what it is. And there's like a tiny little stem cell there, too. It's damaging the hair bulb and the hair bulge so that it can't regrow.

Katie: That's fascinating and really good to know. And I am definitely very excited to be trying your guys' product as well. And I'm curious, it seems like it's gonna work really quickly anyway. But is there anything else we can do since we're talking about the whole holistic approach, whether it be nutrition, whether it be, I would guess managing our cortisol better? So I always recommend get light in the morning so that your body knows that it's morning. Stop getting light at night so that your body knows it's nighttime. That affects cortisol quite a bit. So do the obvious ways that we can address stress. But are there other things we can do to, kind of, even, like, give our body the internal boost as well and make this even more effective?

Dr. Tami: I think that fasting is a really big topic right now, both water fasting, long-term fasting, intermittent fasting. And I always have a philosophy that something could be right but it might not be right for you, and it might not be right for you right now. And so, fasting and trying to grow hair at the same time is not a good idea. That's one thing. Now, if you're just delaying your breakfast and having a greater period of not eating, then that's not the same and, you know, intermittent fasting. But we wanna make sure that your body is getting enough nutrition. You know, vitamin C is in seven parts of the pathway to make collagen. And so making sure that you're eating enough brightly colored vegetables and fruit. You know, people think, "Oh, I'll just take vitamin C." Well, vitamin C is ascorbic acid and it's just a tiny part of the holistic vitamin C molecule. It's not actually the whole vitamin C molecule. So you want to give your body what it really could recognize. If your great-great-great-grandmother could recognize it, then it's pretty good. So make sure that you're eating a very brightly colored diet. Make sure you're getting enough protein to support the amino acids. And be careful of stresses because fasting can be a stress for some people.

Ian: The other obvious one is the exercise component because so much of it is dependent on oxygenation and proper blood flow, right? You've gotta get the nutrients. I mean, we can additively place things topically but you still have to get blood flow up there and have access to what Tami was just alluding to, have access to all the nutrients that are going to be the components that really do elicit that change. So you've gotta do some sort of exercise. It doesn't have to be super rigorous or anything like that. But even walking actually would be good, especially in this day and age when people can't go out to the gym in a lot of states. That's actually the only other one I would add is if you can take care of your diet and your stress level, shout out to meditation. It's one of my fave pastimes as well. I think those three things, you know, the meditation, the diet, and light exercise, in addition to the structure of the system that we put together. That's pretty much the trick right there.

Katie: Perfect. And I will make sure that we have direct links in the show notes. That's [wellnessmama.fm](https://www.wellnessmama.fm) for any of you guys listening while, hopefully, exercising or maybe driving. And I will also put links to some of the studies that we've mentioned for the people like me who love to go deep on the research, as well as to a post where I've written about the light component and about the stress components. So you guys can go deeper on those as well. And as we get to the end of our time, Ian, I know I already asked you this on our first episode, but I'm gonna ask you again too. I always love to ask, selfishly, for any book recommendations, if there have been books that have had a profound impact on your life and if so, what they are and why.

Dr. Tami: I think that the...so many books. Of course, I love reading. The book that I had that has had the biggest impact on my life is the one that I read over and over and over again, and I think it's because it says something different every time. It's called "The Four Agreements." I think it's just a good life lesson and a good way to learn how to change your perspective at whatever phase of life. I was actually flying here and I thought, "You know what? I think that 'The Four Agreements' book would be an excellent graduation present." It's just such a...This is the way that...if you can see the world this way, it's gonna be a lot better for you.

Ian: Okay. I've been chomping at the bit for this question, actually because I had a very profound experience since last we spoke. The book would be "Power vs. Force" by David Hawkins. Oh, my God, oh, my God, oh, my God, literally, the most impactful book I've ever read. And truly, the profundity is off the charts. I wish, I hope everyone goes out and gets it. Just the description of the progression of human consciousness and the evolution of us individually and how it relates to what we can do to help one another and move society along, truly beautiful. Bar none, the most impactful thing I've ever read. And I would really recommend with all of my heart that everybody go out and get it, read it, and try and apply the ideas and the principles in it. Just fantastic.

Katie: I love both of those recommendations so much. I've probably bought, at this point, maybe 50 copies of "The Four Agreements." Everybody on the Wellness Mama team has read it. My kids have read it. I give it to friends all the time. And I just recently also read "Power vs. Force." And it's now on my oldest son's reading list. I pass on the really good ones. I do the five-minute summary on the back and then pass it on to my kids. So, I'm excited for him to get to read that at almost 15 versus me getting to read it now at my age. It's definitely a profound book, for sure. And I love both of those. I already knew I loved you guys. Now I love you even more.

And I'm really excited that we got to go deep on this today because I think, like we talked about in the beginning, so many people are affected by this. A lot of people maybe are even shy to talk about it and feel ashamed because of it. And I've always looked for the holistic solutions. I know that you guys have as well. And I know, Dr. Tami, we talked about some of these things, not hair loss, specifically, but the holistic side of things years ago. And I am always excited when I can find an option that is insanely effective and also natural. And that's a very, very hard combination to nail. And I love that you guys have done that. So any final thoughts or advice?

Dr. Tami: Yes, you reminded me of something. I want to encourage everybody to reframe self-care. It is not selfish. It is not vain. You do not need to feel ashamed. Self-care can be science-based and it is good for you.

Katie: I love that. That is a perfect place to end. I'm gonna make that a quotable because I think, especially as women and moms, we can feel guilty for self-care. And I know that that overuse analogy about putting on your own mask first and masks, of course, have a whole different connotation after this past year but that has a ripple effect. It affects all of us. And I've said from the beginning that moms, especially, are the most powerful force on the planet. And so anything we do as moms to help with self-care, take care of ourselves, it ripples out and affects so many people. So I love that you brought that up. I love you guys. I know that there will be many more rounds and I look forward to them.

And I'm so grateful for you guys for your time today. And of course, as always, grateful to all of you for listening, for sharing your most valuable resources, your time, and your energy with us today. We're all so grateful that you did, and I hope that you will join me again on the next episode of the "Wellness Mama" podcast.

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