Hair Thinning After 35? The Root Cause Approach That Actually Works Transcript

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Introduction to Hair Loss and Gray Hair

The number one reason we go gray is because there's too much hydrogen peroxide in our cells. And that's weird because we use hydrogen per oxide to bleach our hair or color our here.

But ultimately hydrogen Peroxide is damaging to our body and to ourselves. The way that this works is when your mitochondria are producing energy in your body, in yourselves, then one of the side effects or one the ingredients that's made is hydrogen peroxide.

And though your has interesting antioxidants like glutathione and catalase to try to get rid of this, but still some of these persist because as we get older the clearance system is not as good, we have less antioxidants than we should in each cell.

and so the hydrogen peroxide levels start to build up in your cells and then they start damage the mitochondria which are producing the energy so it's basically damaging the factory that makes the Welcome to the Functional Edge.

I'm Dr. Julia Ward and this is where science meets real-world strategies for living healthier, sharper, and stronger. From uncovering hidden environmental toxins to unlocking peak performance and mental clarity, we cover it all.

Ready to take control of your health and thrive? Let's dive in. Hello and welcome to the Functional Edge podcast. I'm your host, Dr. Julia Ward, medical director and founder of Balanced Body Function Medicine.

Today, we're honored to welcome Farza Khan to our show. In this episode, Farzah will be sharing insights on hair thinning, hair loss, and a root cause approach to restoring hair health.

Podcast Welcome and Guest Introduction

Farzar is the founder Fully Vital, a hair wellness company focused on natural science-informed solutions and host of the Anti-Aging Hacks podcast, His journey began through his own experience with early hair loss, which led him to research hair biology, collaborate with clinicians and researchers worldwide, and develop holistic strategies addressing circulation, nutrient support, scalp health and internal balance.

So stay tuned for an engaging conversation that promises to empower and inspire your path to wellness. Welcome. Thank you so much for being here. Yeah, so let's start with some basics.

When someone comes to you concerned about hair thinning, what do you see as the most common root causes? Yeah, totally. So I've been working a lot with women and also with men for the last many, many years, specifically for hair loss.

And there are many reasons for her loss and root causes for their loss, they're a little bit different for women versus men. Let me start with the women first.

The number one root cause for woman has to do with hormonal changes. You see this manifest when women get into perimenopause and the menopausal age, right around starting at the age of 35 and beyond.

when hormones start changing. So estrogen and progesterone start to go down a little bit and this causes a relative imbalance with testosterone and that relative imbalance of testosterone typically converts to DHT, dihydrotestosterone, which then goes up to your scalp follicles and starts to shrink them.

Root Causes of Hair Thinning

Over time what you experience is a thinning, a progressive thining of the hair follicle This is the same method of action in both men and women. But this follicle starts to thin over time and every time a new follicles grows out, it's thinner and weaker and wispier than last time.

And over the time if this is not addressed, then you can permanently lose that hair. It can just basically shut down and go dormant and not grow again.

So that's the number one reason for hair thinning and it is also the most pernicious, the more dangerous, something you have to address sooner than later.

because it's a progressive condition. Then there's other use cases. And even before I go into that, I've had women ask me, how can I tell what type of hair loss I have?

Because there are many. For women, it is multifactorial. So if you are a woman that's undergoing hair thinning, hair lost, or even if your a man, you can do this test.

Next time you're in the shower, and you shampoo your hair, washing your hairs, then just pull a few hairs that you have in your hands, maybe. Just stick them up against the tile in shower.

or against your shower curtain because it's typically light colored so you can see your hair against it and if you stick a few hairs on it then what you might notice that some hairs are thinner and some hair are thicker and so this progressive thinning typically like I said happens because of the DHT overload where DHTs actually thin it so that's really one easy way for you to compare your air follicles and hair strands to see which ones are thinner versus not.

So that's usually a good giveaway. That's one way to know and that is again the number one cause of thinning for women and for men. Now, for man, this happens early on in life because testosterone is very, very high when they're just after puberty.

The ages of 17 to 25 are very dangerous for a male because the testosterone are absolutely peaking. For women, this happens later on in life because they're so well protected by estrogen early on that by the time they hit 35, 40, 45 and estrogen levels are falling and there's imbalance with testosterone, that can typically kick off the hair thinning cycle.

The root cause is DHT, but the kickoff trigger could be many, many things. It could high blood pressure. Could be high levels of stress, life changes.

Like it's really interesting how many thing can actually trigger it. but the root cause is still the DHT. And then if you want, we can talk about some of the other causes for women specifically.

Yeah, absolutely. Like I see nutritional issues are usually a problem in my practice. What deficiencies are most strongly correlated or connected to hair loss?

Yeah. According to science, there's a few ingredients that are very, very critical nutritionally for hair. So this is vitamin B12. We've got folate, vitamin D, iron and zinc.

These are the big five. You want to be in the middle of the range for all five of these. If you're on the low end of range, you are probably going to experience some hair thinning.

And you don't want be too high in range either, but at least in middle range. So these are big 5. Obviously you want eat more protein. That's always a given.

Hair is made of protein, specifically keratin protein So you wanna have that. Collagen also helps because it helps like smoothen your hair follicles or hair strands, I should say, and help with breakage even.

So high protein collagen and the big five that I mentioned, those five have to be very, very important. They are very

and they should be considered. If you are losing your next time you go to the doctor, at least check for those in addition to other things we'll talk about in this podcast.

Right. So something I've seen more in my clinic and I'm curious about your perspective. With the increase of the use of GLP-1 medications, have you noticed any changes in hair thinning or hair loss patterns and what do you think could be driving that?

Yeah, absolutely. Anytime a patient, this has been happening for a long time, anytime a customer, consumer loses a lot of weight in a short span of time the body goes into a state of shock.

Because the body doesn't know what's happening, right? This has never happened in the past. In the last millennia of human life. And now suddenly when you lose 15 pounds in a month, it just feels like a big change for the bodies.

Nutritional Deficiencies and Hair Loss

So this is also what typically happens when we have high levels of stress or a breakup or surgery or something that induces a physical or physiological stress on the It says, hey, I think something is wrong, we may be dying, so I have to conserve all of my resources towards the core organs of the body, heart, lungs, you name it, like the cor organ's brain.

But the hair, your hair is quite frankly dispensable and it's not required for you to live. And so in that instance, it pulls a lot of resources, the vitamins, minerals away from the air follicles and towards core organ to help you survive.

The problem with that is immediately your hair follicles shift into the resting phase because they've lost the blood supply or the nutrients or, the bodies kind of abandoned them, quote unquote.

And so, they shift in to this resting-phase after which they have to go to the shedding phase to grow back again. And therein lies the rub, because yes, in the shedding, when you go through this phase, a lot of people experience this through COVID, or after COVID is that you would lose 30, 40, 50% of your hair because that's how much hair shifted into that phase because of the stressor, you know, the weight loss or the COVID or anything else that is an acute stresser.

you might lose a lot of your hair. It's going to come out in fistfuls. And it's very, very scary to a lots of people. But what's interesting is that typically a a of this hair will grow back unless you have multiple root causes of hair loss going on at the same time.

A lot people do. So if you had that multiple roots causes going then because this should resolve by itself, this huge loss should resolved by it self, it doesn't.

Because the second root cause prevents all of the hair growth back. And so now you don't realize, you think it was the COVID or the weight loss that caused it, it will cause a lot of hair loss.

Stress, Weight Loss, and Shedding

But what's really important is you have to make every attempt in that type of scenario to bring all the hair back, to support your hair in every way possible so that you can get all their hair to come back.

Yeah, yeah. And I think it's interesting too that there's a big time delay too between the stressor and the actual hair loss, right? It's not immediate.

Right. Yeah. It is about two to three months later after the stressful, which full-locks a lot of people because they don't expect it. But that's how human and hair biology work.

If someone wants to investigate hair thinning more deeply, what labs or testing do you consider most valuable?

Yeah, so the two biggest tests that I see, obviously they talked about the big five ingredients, those are absolutely important to do.

And then in addition to those five, I typically recommend, or iron's already included, iron, TIBC and ferritin levels just to make sure where you are on that scale because too much iron causes hair thinning and too little iron also causes her thinnings which is very interesting we have to be very careful with iron and the second one is the thyroid thyroid full panel with antibodies because this will tell us how the tyroids functioning and thyroid is critical for hair growth as well because it's the energy factory, energy production engine of your body.

And so we want to make sure that thyroid is functioning and it is not attacking your own cells with the antibodies. So we wanna make the thyroid in a good condition and its also in the middle of the range.

These are the two tests that I recommend and that we see for the most part in consumers and patients that are going through this. What some folks ask, should you get a DHT test?

And what's really interesting about this is the DH tests are inconclusive. Because sometimes even normal circulating levels of DH can cause or trigger an abnormal reaction in the scalp.

So even though there's normal levels circulating, your scalp might be more sensitive to DH. And that's a genetic component, right? So it's tricky to say, let's measure DH levels, and if it high, it bad, if its low, its fine.

Unfortunately, it doesn't work like that. That's interesting. What about zinc levels? Do you get like an RBC zinc? Yeah, I highly recommend getting a zinc test as well because that's part of the big five.

And so work with your doctor. If you do the iron panel separately and then you use zinc separately, but both of those are critical for you to know. Like B12 zinc, folate, vitamin D3 and iron levels, they have to be carefully managed.

Okay, great. I'm also very interested in genomics and personalized medicine. Do you use genetic insights to determine someone's predisposition for hair loss or guide treatment disorders?

For example, tests like the Trico test that look at gene variants related to follicle biology and nutrient metabolism, do you find this clinically useful?

Yeah, we haven't been using these tests quite as much because we end up recommending to a lot of folks is a few blood tests to kind of understand where they are and we want to also measure their stress levels because stress is one of the biggest contributors to whole body breakdown as well as hair loss and so we wanna get the stress level as low as possible in the human body.

And so that's one more reason. So I'll just touch on stress real briefly and then I will come back to your question. As we mentioned, acute stress can cause a lot of shedding two to three months after the incident, but chronic stress also is a major factor.

Testing for Hair Loss Causes

It causes chronic hair loss. We call it chronic telogen effluvium. Chronic hair losses are just ongoing and nobody really knows why it's happening. it's because you have just elevated stress levels, and most of us do.

And so one of the key goals that we have is to get patients to really tamp down their stress level, which then we see improves biology and markers across the board, including their sleep, of which it also ties back into hair and stress, levels and cortisol spikes.

So all of that's connected. Now, when it comes to genomics, what we do find is that with hair loss, once you identify the root cause, then it's really a factor of hitting this problem with as many things, we have to throw the kitchen sink at it.

And so it requires four or five sinks at the same time to get the best results. So because we are seeing that a lot of patients respond quite well to this targeted multifaceted approach, We're not diving very deeply into the genomics aspect of it as of yet.

Okay, okay. Patients always ask about practical things they can do today. Do shampoos or topical products truly make a difference? And how often should someone be washing their scalp or hair?

Yeah, great question. So, shampoos, I think, are pretty worthless. And this is a bold claim, but it should be normalized by now because a shampoo sits on your scalp for five minutes, especially for women, one to two times a week.

They're not washing their hair every day, right? And so, there's not enough you can do in five-minutes, two-times-a-week, that's no time, basically no-time on the scalp.

With that said, there is one shampoo out there that contains the ingredient Ketoconazole. So you could get that with a prescription. You want to get the 2% KETOCONAZOLE shampoo.

That has some data on reducing inflammation levels on the scalp, which can be a good thing. If you were to use any shampoo, I would recommend using KetoConoZole 2%, as a frontline treatment.

Not for too long, maybe for three months. and then switching to a caffeine-based shampoo that can support and energize hair follicles for the long term.

So we're about to launch a shampoo as well. But anyway, I would recommend using Ketoconazole 2.0 or 2%, the frontline therapy for three months and moving on to more natural approach.

That's the first part of your question. The second part was around hair serums or topicals that may be effective long-term. Obviously the most steady topicle in the hair loss space for men and women is minoxidil.

And there are a couple of big issues with minoxidil, and they're big because one of them is the delivery mechanism of minuxidils.

Genetics, Stress, and Treatment Strategy

It uses propylene glycol, which can be quite irritating to the scalp and therefore then that leads people to not apply it every single day because you want to have good hair.

You want to have good hair days, and you don't want wash your hair for many days. So if the moment you wash you hair that same evening, you have to apply a sticky solution, then women prefer not to do this.

And so that leads to non-compliance, which is a big thing. The second issue with minoxidil is that, this is the reason a lot of people don' see a long-term benefits from it.

is that it requires, minoxidil needs to be converted to its active form for it to work on your scalp. And for that, you require an enzyme on you scalp, called minoxide sulfo-transferase.

So, a lot of people don't have enough of the enzyme to convert minxide into its actual form. That's the other reason why maybe some people you know, do so well in monoxidil.

Now there are some tests that can tell you if you'll be a good candidate for monoxide and you may try those. I typically just try to avoid topical monocytil because it's just too much of a hassle.

And so what I prefer instead is to use a well-formulated, well researched topically solution that's non-oily, non greasy, that contains clinical ingredients that have good results.

This we found can do as good or better than Minoxidil 5% for women. And so that's my recommendation typically because compliance is extremely important when it comes to hair growth when you're taking either using topical stringent scalp or using supplements.

You want to do something for 90 days because just like the hair fall, hair falling out takes about 60 to 90 day, same thing with hair grow. And you'll be surprised at how much you could get if you like combined three or four things.

Like we talked about, you know, doing a lot of things together at the same time. If you combine that approach and you understood, roughly understood the root causes, cause that can go very far as well.

Roughly understand you use your root cause and then use the best approaches available out there that are natural and that allow you to be consistent over time, that is the way to get your hair back.

Okay. And is it true that if you use minoxidil, you have to keep using it? Or if it stops, it's going to shed again? Yes, yes. So, two things happen. Number one, there's something called the Minoxidal Dread Shed.

As soon as you start applying minxidill, within a few weeks you lose a lot of hair. This freaks a lof of people out. Because what minuxidils are trying to do is trying push the existing hair that are just kind of hanging out, hanging around.

out so it can grow new hair. But that's going to take 90 days. And so a lot of people freak out of like, what's doing on? Why is my hair shedding right away?

So that is called the dread shed. It's very well known in literature. The second thing with minoxidil, as you rightly pointed out, is that it is a hair growth promoter.

it doesn't address any of the root causes behind hair loss, but it helps promote hair grow. So I categorize them separately, right? Root cause products that help address root cause and then there is the promoters of which minocidils is one of them.

And so, yes, you have to. Minoxidil extends your hair in the antigen or the hair growth phase, so it keeps it on your scalp for longer. But it's extending it, it is not forever, not a given.

Shampoos, Minoxidil, and Topical Treatments

So the moment you stop minoxidal, the extension of that antígen phase is going to stop, and thereby you're going lose the her follicles that it was holding up.

And those hairs are going fall out. So that's the downside of minoxidil is you have to use it for a very long time. And that is the other reason I don't love it because it's like if you were to something for long-time, minxidils is not it, right?

Unless you're in diastrates and I understand that sometimes you must use minuxidl and that totally fine. But given if I have a choice, I will prefer to not use them, topically.

Okay. I'd love for you to share your approach in products that are designed to support people dealing with thinning hair. What makes them different? Yeah, totally.

Thank you for this question. What we did is we spent many, many years trying to understand like, what are the root causes behind hair thinning? And we found that there is many of them.

And so then we said, okay, is one product typically enough? Because we see a lot of people and a lotta people come to us to say, hey, can I just buy the supplement or can just by a serum?

Like, yes, you can, of course, as long as it's formulated well. But the problem is that, like I said we've seen this in

many many year already. that over many, many years is that the best results for hair growth happen when you combine three, four, five things at the same time.

So what does that mean? That means using or taking a hair supplement that's well validated every single day, right? So you support internally all the root causes.

You give your body all nutrition, the big five that I talked about, you have them. readily available in one supplement and then also other things like circulation enhancers that can help boost blood flow and also delivery of these nutrients to your hair follicles.

So the supplement is very key because it helps support your growth from within and we believe we make the best hair supplement in the market. And so you're welcome to try it out because it addresses about six root causes of hair loss on the scalp.

Like we talk about circulation, we talked about the core nutrients that you need. Also the nutrients have to be in the right dosage because some nutrients like iron and selenium, if you take too much of those, you can lose hair.

So you have be very careful with selinium and iron as well. And we've got ours in right doses and we got all the six roots causes that we address using the hair supplement with Fully Vital.

The second product that I'm very proud of is the Hair Serum, which is called the Enhanced Hair serum. And this addresses five root causes of hair thinning.

It addresses inflammation on the scalp, addresses oxidative stress, it addresses DHT hormones and circulation, and also scalp health and rejuvenation.

you know, peptides, exosomes, senolytics, along with a host of hair growth ingredients that also block DHT. So this is by far the most powerful serum on the market, because it's also leveraging cutting-edge new technologies that are available to us, like senolithics and exasomes.

They're all available in a hair. And so I would highly recommend, and also it is non-greasy, so you apply it in the evening. I've applied it to my hair like the last three or four days and I haven't washed my hairs since.

And so you can easily style your hair as well after you apply it. It evaporates and dries off. And then the third thing I would recommend is a lot of hair brushing.

So we sell a bamboo brush. That's wooden, it's natural. We recommend you brushing your scalp. Not your head, but your skull. About two to four hundred times every single day.

Because that really promotes circulation, blood flow, gives you, you know, kind of like a massage to your scalp. And again, the goal is to increase circulation so that nutrients can get into the follicle to where they need them.

And then the fourth thing that I highly recommend at a minimum is a derma roller. If you're experiencing hair thinning, then a Derma roller has been found in scientific studies by itself with nothing else to regrow 15% hair, which is lot of hair.

So if you were to use a dermatologist once a week, this is what I recommend, at one millimeter depth. and especially use a serum after that for better penetration, then you can see a rejuvenation of the scalp.

You can the growth factors come into play and they help heal that area and help you grow more hair. In fact, with derma-rolling, even in areas in your body that you might have scars on, and you start dermarolling, you will see hairs growing out, back out where you had no hairs for many years.

It's quite a magical thing to do. And so those are the four minimum things I would recommend and there's a few more we can talk about as well. Okay. With that derma roller, does it have to break the skin or is it just causing a

little indentation?

It's just a one millimeter needle that we sell that's found to be the best depth in some studies. Some studies go very deep, but then you can bleed. We don't want to go there.

So one millimetre, we believe, is the based according to scientific data. And it doesn't really break. There's no blood. No blood rushing down your face.

You can't even see it. It is tiny pinpricks into your scalp, that allow for a lot of rejuvenation to happen. And then what I typically recommend is apply the serum right after so you get even better penetration of the ingredients.

That's great. I'm curious as to what your thoughts are on photobiomodulation, which is like the red light therapy for hair thinning and loss. Is there evidence or clinical experience suggesting that it can support follicle health or regrowth?

Hair Growth Products and Scalp Stimulation

Yes, yes, there is clinical evidence. Again, I categorize this as a hair growth promoter, similar to minoxidil, but not as something that addresses root causes.

So we want to do both. We want address all the root cause as possible. And then if we can add on some more hair-growth promoters, the more the better.

I'm totally happy with that. This is not a front-line treatment that I recommend to customers or clients. But what I will do is that… So here's how it works.

Let me address that first. The red light therapy, especially certain wavelengths of it, have been known to increase cytochrome C oxidase in your mitochondria, which helps promote more energy, or make more, and if your cells have more then they're going to do the work that they are supposed to which is to grow your hair.

And your hair in particular requires a lot of energy. There's a lots of growth happening every single day. And it's one of the fastest dividing organs or organelles in the body and cells in body.

So therefore that needs a whole lot energy and what red light therapy can do is help provide more energy that helps your hairs grow more. and not fall off as much because now it has more energy.

But again, you have to use it every single day. You have use a cap or helmet. So what I do find is compliance can be a challenge for a lot of customers because they'll use for two or three months and then it just sits in a closet the rest of its life and never use again.

If you're going to try to find a cheap one, These devices are pretty much the same. There's a lot of marketing around those, but a love these devices or the sames you can find a cheap one to that and then add that on top after you've got all the main products in place.

Oh, got it. Got it! Well, switching gears a little bit, let's talk about gray hair. What are the primary biological drivers behind the graying process?

Yeah, there's quite a few biological drives behind gray. The number one reason we go gray is because there is too much hydrogen peroxide in our cells.

And that's weird because we use hydrogen Peroxide to bleach our hair or color our But ultimately, hydrogen peroxide is damaging to our body and to ourselves.

And the way that this works is when your mitochondria are producing energy in your body, in yourselves, then one of the side effects or one the ingredients that's made is hydrogen Peroxide.

and though your body has interesting antioxidants like glutathione and catalase to try to get rid of this but still some of these persist because as we get older the clearance system is not as good we have less antioxidants than we should in each cell and so the hydrogen peroxide levels start to build up in your cells and then they start damage the mitochondria which are producing the energy so it's basically damaging the factory that makes the And so this makes cells tired and old and this causes your hair to go gray because the pigment cells stop working as well.

And what we want to do is to help support the clearance of the hydrogen peroxide in your body as one of first line treatments. So how do you do that? You increase antioxidant levels in the body.

You help rejuvenate the scalp. you provide a lot of support with anti-inflammatories and other things that are important for re-juvination. That's one of the ways that we kind of address this.

But also there are other root causes for gray hair. So stress, prolonged stress can cause gray hairs.

Red Light Therapy for Hair Growth

If you have a crazy amount of stress like an insane amount stress for a short period of time, that can cause you to deplete all of your pigment cells.

And that is why you will see some people that go gray overnight. Well, it's not overnight, but it could be over a few months because the gray can travel up the hair shaft.

It's already dead, right? So it has to grow out in the next hair growth cycle. And so stress is another one. We've got high levels of homocysteine can cause more gray.

So you want to get those down as well. And for people that go premature gray, there's also more interesting reasons like chronic illnesses, high inflammation, smoking, drinking, environmental pollution, bad diets, no exercise.

In fact, even getting a post-grad degree, postgraduate degree can cause you to be more at risk for gray hairs earlier than others. And even like your height, if you're taller than average, you are at more risk of having more gray.

So there's a host of reasons, but the main one is hydrogen peroxide levels and high stress levels. Then also there is the stem cell depletion in the niche.

For some reason, the gray hair stem cells, so the color, melanocyte stem, cells seem to deplete faster than other stem And so there's ways to support those stem cells, protect them from radiation, from the sun, et cetera, and to keep them safe from bad shampoos or bad ingredients or back beauty products that may be harming you.

And it's important for you to use really clean beauty product. But there are ways just support the grays as well from inside and from outside. Wow, that's great.

So, I mean, if people are going to be turning gray, what age does this typically happen? Yeah, another great question. Caucasians typically start turning grey in their mid-30s.

And for Asian ethnicities, it's around in starting in your 40s, right around when you turn 40.

Why Hair Turns Gray

And then for African nationalities or ethnicities, it starts around 44 to 45. So mid 40's is when they start going gray. This has been observed from data all around the world.

If you are going grey earlier than 35, then that's typically premature hair graying. But if you're Caucasian and you growing gray 35 then, that is right on schedule.

It is helpful for you if you are looking to maybe like slow down the greying process or reverse it naturally without using bleaches or colorants or going to the salon every three to four weeks to cover up your roots, then our products can certainly help.

What I would recommend is that if your less than 30% gray, you will have a better chance or better result with reversing existing grays but also delaying new gray.

And so we can suddenly delay new gray easier. But if you're more than 50% gray, then it's going to be tough to reverse or return all of them back to the pigmented state.

Okay. It sounds like hair graying and hair loss are similar in that they're both sensitive to a lot of stress. Yes, your whole body is sensitive distress.

And it's just the story we've been learning through, I think in Ayurveda, they talk about stress being the thing that messes your body up the most. So we're learning that as we get more science and more clinical studies and data, we are learning and confirming that stress just destroys the body and your system sort of sets the balance in your body more than anything else.

And so in this fast-paced world, we do have to take time to ourselves to slow down and deregulate that stress. Yeah. So speaking of stress, let's talk about antioxidants.

How important are they and are there particular ones that you find meaningful for slowing the process? Yeah, yeah, absolutely. So the main antioxidants in the body are catalase and glutathione.

And so glutathiol seems to be a good pathway to go after. There's also other very good antioxidants like vitamin C and alpha lipoic acid, very strong.

and others. So what we have in our formulas, especially in the anti-gray supplements, is we've got L-serine, which is an amino acid which has a precursor to glutathione.

This helps generate new glutathiol in your body. We want to be careful with giving you too much glutothione directly, because then your bodies will stop making it.

The body kind of adjusts, and so we give the body precursors to help it generate its own glutathaol through L serine. We also include quite a bit of vitamin C for antioxidant support as well as alpha lipoic acid which is a very strong antioxidate that can even cross the blood-brain barrier to like provide you know support in your brain.

And so these are the three that we use for antioxidants and they're essential both for hair growth but also especially for gray hairs because then they help clear the hydrogen peroxide from your cells.

Let's go a bit deeper into the melanocytes and the melanosite stem cells. What role do they play in pigment production and loss? Yeah, so the cycle starts as follows.

So, melanocyte stem-cells are kind of near the hair follicle niche and they sit there and are pretty dormant until the hairstyle cycle reboots. And so, both the follicles stem cell and melanosite cells kind-of reboot at the same time when a new hair is starting to grow.

and the stem cell, the melanocyte stem cells do is they differentiate and then they, you know, create new melanocytes. These melanosites now travel down to the root of the hair bulb where they now sit and produce the pigment that's going into every hair strand as it grows out.

Antioxidants and Melanocyte Biology

And so that is the connection between these two. One is creating the other and each time the hairline cycle reboots. And so we want to protect both of them because with aging what happens is that you can start to lose the

melanocytes stem cells because you've been sitting in the sun for way too long and there's radiation damage to your cells or the monocytes themselves can not be functioning as well.

So either you're not taking care of your body or you just getting older because that's what happened. and so the cells are slowing down and the melanocyte function is slowing.

And so we want to make sure we support both of those, keeping the melanocyte cells as healthy as possible, and then supporting the stem cells against DNA damage, against radiation, to ensure they last as long as they can.

Got it, got it. Some practitioners connect elevated homocysteine and greying. Do you see a meaningful relationship there? Yeah, there's actually scientific data that corroborates that high homocysteines levels can lead to more greys and there are very interesting pathways of how that can happen.

And so what we recommend typically is B vitamins, B12 especially, Um, methylated B12 can be very helpful at lowering your cysteine levels and it's quite an easy fix.

That's why we've got healthy amounts of B vitamins in the anti-grace supplement that we make just to make sure you're covered on the homocysteines front.

Again, it is just covering as many bases as you can with one supplement. is how can you protect the stem cell niche, how you can help promote circulation, have enough antioxidants to get rid of the hydrogen peroxide levels, balance stress levels with ashwagandha and some other adaptogens.

is to just make sure that the entire supplement is formulated around this anti-aging benefit and also targeting the root causes of grace as possible. In fact, we also added spermidine a little while ago because spermidine has shown some empirical data in reversing grace, but also it's a very good anti aging agent generally.

And it was getting a lot of popularity. So we've got spermadine already in the supplement that's helping you slow down your aging. Okay. And from a practical standpoint, what strategies may help slow down or support reversal of gray hair?

Yeah, again, this comes back to managing your stress levels, extremely important. If you can find some kind of downtime routine every single day, morning and evening, that would be highly beneficial in this format.

The other thing is to really think about what you could do with your diet, anything that you're doing, diet and lifestyle. So anything you're doing that increases if you live in a polluted city, well, you gonna have more oxidative stress in your body, which is going to cause more hydrogen peroxide and more damage.

So that's a given you want to live a city with less pollution, if possible. You want not to smoke, not drink excessively, eat good foods. All of these, when done wrong, can increase the oxidated levels in the body.

So, lowering stress, maintaining a very healthy lifestyle, you know, buying good healthy hair products because they're touching your scalp and damaging it, and not spending too much time in the sun every single day, or at least covering your scalp when you're out in sun, if you sunbathing or whatever.

Those can really help slow down quite a bit your progression and then even reverse some of that damage that you might have done already.

Homocysteine, Lifestyle, and Gray Hair Support

And then you can add on target supplements like ours and targeted serums that help take that to the next level. Okay. And finally, how do you approach helping individuals who want to restore pigment or improve overall hair vitality?

Yeah, so the easiest way would be to kind of listen to what I shared on the podcast. And then if you want to work

with a practitioner to get some of those basic lab tests out of the way, what we do is we sell a hair products, like a bundle, a three month package and a bunch of hair product that really we believe covers all the bases, all root causes.

Most, I should say, there's obviously always more, but as many root cause as we can. cover with the supplement the serum the derma roller and the hairbrush and if you get that as a package then you're really set for the next 90 days to see results because a lot of people quit before 30 or 60 days and so that's why we made a 90-day bundle so you have enough to kind of really see your results and then we also offer a four-month money-back guarantee just because we want to make sure that people get results.

No other company does this, really. And so we sell a three-month bundle, and if you're interested in learning more about it, go to FullyVital.com and go try out the three month bundle for both hair growth or the anti-grave.

That's something that you are interested. But like I said, we have a lot of support available. You can email us at any time. If you just trust us for 90 days and really go for it using all the methods we've developed, you'll be surprised and pleased with a lots of results that That's awesome.

Thank you so much. And we will definitely put your web address on our show notes so people can reference that. Absolutely. Absolutely. And thank you everyone for joining me on The Functional Edge.

I hope today's episode gave you fresh insights and practical tools to level up your life. If you found value in what you heard, don't forget to hit the subscribe, share the podcast with someone who needs it and leave a review.

It's the best way to support our mission of bringing powerful health solutions to more people. For more resources, updates and behind the scenes content, visit drjuliaward.com.

90-Day Hair Restoration Program and Closing

Until next time, stay strong, staying healthy and keep living on the functional edge. Thank you for joining me on the functional edge. I hope today's episode gave you fresh insights and practical tools to level up your life.

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