

Announcer ([00:01](#)):

You are listening to The Human Upgrade with Dave Asprey.

Dave Asprey ([00:02](#)):

So when someone says you're a lookist because you believe how you look matter, how do you defend yourself against that terrible, terrible comment that people might throw your way?

Rachel Varga ([00:18](#)):

Interesting. What I've observed since 2011 working with thousands of people is there's actually the subset of people that I've observed, and as a researcher, I love to observe. And there's actually men and women that I've seen aged 60 to 90 that show up as more beautiful than someone in their twenties and thirties. Even though they have overt signs of visible signs of aging, it's the way that they carry themselves. And there's very specific things that they do in their lifestyle that give them energy and it actually that they're living basically a life with body, mind, spirit, energy practices, family unit.

Dave Asprey ([00:56](#)):

I'm marveling at the strength of the media training you've received to completely dodge the question. However, Listly, have you thought of politics?

Rachel Varga ([01:05](#)):

Definitely not.

Dave Asprey ([01:09](#)):

So back to defending yourself as a look, how are you going to do this?

Rachel Varga ([01:12](#)):

I look at people in a certain way when I'm actually looking at, when I'm seeing someone, is the brightness in their eyes? I'm actually observing for signs of oxidative stress status. So do they have overt signs of inflammation around their eyes? You're going to

Dave Asprey ([01:27](#)):

Use science and facts to defeatism. Okay, well that works. Look, is actually completely a fantasy of victim minded people. Here's the deal. How you look does matter even if you wish it didn't. And I've been obese, I've had really bad skin. And even in those situations, it doesn't affect how good of a person you are. It doesn't affect whether you're a moral person, whether you have high integrity, but it does affect how people judge you before they have a chance to think. Because your operating system automatically judges all of reality for a third of a second before it shows it to you. That's just facts. And that's one of the reasons that you might consider taking care of your skin to the best of your abilities. And I know I've spent a lot of my life not as healthy as I am now, but to pretend it doesn't matter is a very weird just mental gymnastic like yoga pose.

Rachel Varga ([02:21](#)):

So many people do it right? Yeah. Especially the super crunchy granola type of individuals out there. They take such good care of themselves in various aspects, but they're not looking after their skin. And

in fact, when they're using products that they think are clean, they actually don't realize that some of the ingredients are actually full of rancid oils.

Dave Asprey ([02:42](#)):

So what we're talking about here, just to be really clear, is we're talking about not makeup and stuff like that, but we're talking about having healthy skin as an organ, which affects what you could call beauty or handsomeness or attractiveness or the glow or whatever. So what I'm suggesting, and I think what you're saying here is let's have healthy skin, but most of what people do for their skin is bad for their biology. From what I've seen, even in my fertility book 10 or 12 years ago, I'm like, if you can't eat it, you probably shouldn't put it on your skin. There's stuff in a lot of skincare products that honestly, I wouldn't rub on top of my dog.

Rachel Varga ([03:21](#)):

Endless formulations change so often.

Dave Asprey ([03:24](#)):

Oh, talk about this. You had it checked out last quarter and it was really safe. And then what are companies doing now?

Rachel Varga ([03:29](#)):

Yeah, it's really interesting because I connect with people. I love to see what products they're using and actually looking at the ingredients of every single product they use. So I have my bachelor's of science in nursing, then I have my gen chem, organic chem and biochem. So I love to have my finger on the pulse of some of the trends. Yet this, I have seen ingredients including BPA and even tin as ingredients in skincare that are being marketed.

Dave Asprey ([03:56](#)):

They're adding tin,

Rachel Varga ([03:57](#)):

They're adding tin. Tin is

Dave Asprey ([03:58](#)):

A toxic Metal as well as I've even seen DNA.

Rachel Varga ([03:59](#)):

And these are in some of the biggest brands that are marketed. Who cares what? There's DNA in to younger individuals, but what DNA is that you're not a planet is an animal, definitely not a vegan. I know

Dave Asprey ([04:12](#)):

That was a joke, but even vegans eat plant DNA. True and healthy humans eat animal and plant DNA.

Rachel Varga ([04:20](#)):

I've also seen more canola oil,

Dave Asprey ([04:22](#)):

But when someone says there's DNA in there, it's like, well, what is it? There's DNA floating in the air in this room that's not mine in here too. And we'll just have to deal with that.

Rachel Varga ([04:30](#)):

Yeah, it's interesting to see the shifts. So what happens is I noticed that these big skin companies that previously were actually pretty good, however, they were somewhat clean, but actually not providing the results and performance that people are really seeking. And then the formulation shift, and I've seen that quite a bit over the last six months to a year. And I think it's just companies, they get bought, they're wanting to increase their margins, and actually every quarter I go through every single ingredient, every single product that I offer. And most people don't do that.

Dave Asprey ([05:03](#)):

Oh, when you say products you offer, these are other brands that you just carry in your store?

Rachel Varga ([05:07](#)):

Yeah, I work with a number of,

Dave Asprey ([05:08](#)):

You can have a shout out on the podcast. What's your URL for your store?

Rachel Varga ([05:12](#)):

The school of radiance.com is whatever school

Dave Asprey ([05:14](#)):

Of radiance.com. Cool. All. And so you go through and you review because the ingredients change

Rachel Varga ([05:20](#)):

Because I care. Well,

Dave Asprey ([05:21](#)):

Yeah. And sometimes they're not disclosed. One of the companies that I'm well known for working for, I haven't been able to review anything other than what's printed on the labels. And I know the labels have changed, but I have no idea what's going on. So it gets like that with food companies too. Absolutely. It's really good this quarter and then next quarter you start getting hives from it and oh, look, they added more protein in the form of some Latin words and you look it up and they're putting locusts in there like actual bugs because it raised the protein count, but they don't tell you on the front label. So skincare is even worse. It's not regulated, which is good if they regulated it, you could only put gasoline on your skin.

Rachel Varga ([06:01](#)):

It is all about being a more conscious consumer, and I know that's what this community is all about. So it's not just about your skincare, it's about your haircare, it's about your personal care products, what you're washing your clothes with, what you're washing your dishes with, what you're cleaning your

home with. So the angle about being a biohacker isn't just about buying all this technology. It really is about making good decisions as often as you can to reduce that oxidative stress status.

Dave Asprey ([06:26](#)):

Okay. You convinced me, and I think our listeners, that if you take care of your biology using core biohacking techniques like coal fund math, blocking. Yeah.

Rachel Varga ([06:35](#)):

I'll add to what my basic recommendations are too.

Dave Asprey ([06:37](#)):

Okay. Well, are I think we talked about each of those, didn't we already?

Rachel Varga ([06:41](#)):

We missed a couple.

Dave Asprey ([06:42](#)):

Okay. Tell me the other ones that we didn't talk about that are just foundational to being a healthy human, which give you healthy skin.

Rachel Varga ([06:48](#)):

It really comes down to purification.

Dave Asprey ([06:49](#)):

Okay. Master list. Give me the bullet points.

Rachel Varga ([06:51](#)):

Air, water, lighting, electromagnetics, irregular detoxing. So with your air, making sure that your air is purified in your main living area to reduce VOCs when you're cooking as well as while you're sleeping. And yes, I pulled the air purifier from the main living area last night into my room because I noticed that the air quality here is a little different than what I'm used to. A little bit more pollen.

Dave Asprey ([07:13](#)):

Oh, there's a ton of pollen here.

Rachel Varga ([07:14](#)):

And I noticed it in my eyes as I was washing my skin. So when we're caring for our skin, doing our cleansing, actually touching your skin, doing lymphatic drainage actually really helped me last night to mitigate that as well as some other things. But air purification is so key. I even have it in my car too.

Dave Asprey ([07:31](#)):

Oh, you put an air and

Rachel Varga ([07:32](#)):

Travel with an air purifier.

Dave Asprey ([07:33](#)):

And so I have two spare guest bedrooms. Rachel stayed over and I didn't know it, but apparently you stole the air filter from the media room, which is great. That was the one bedroom that doesn't have an air filter because right now my studio has one slash office. My bedroom has a whole house one, the kitchen has one. Every room has a large air filter. It's probably enough to filter four times the house that I have because you feel so much better. Absolutely. And your

Rachel Varga ([07:58](#)):

Skin looks better too, and you sleep better. So purifying your air is super key. The next thing is water drinking purified water. So many things that we can do with water, we can structure it, we can remineralize it, we can add different nutrients to it. Bathing and consuming purified water is super key. However, there are various different levels of water purification. So there are some raiders that we nerded out about last night that I was able to share with you as well. So purified water with what you're consuming, what you're bathing in will make a big difference. Lighting is really key. So one of the things I love about here is you've swapped out all of your LED lights. Well, the exception of one or two,

Dave Asprey ([08:37](#)):

I missed two. Yeah. Found those in the,

Rachel Varga ([08:39](#)):

And it's something I do too as well. So it's about having as much control as you can in your environment so that when you go in the world, you can handle a little bit more oxidative stress than when you're home. When you're sleeping, you're spending more time recovering because you're in a more purified environment,

Dave Asprey ([08:56](#)):

Changing the environment around you and inside of you so you have more control of your own biology,

Rachel Varga ([09:00](#)):

Kind of what biohacking is. Oh my god,

Dave Asprey ([09:02](#)):

Right? Yeah. But it's neat because you're an aesthetic nurse, so you're looking at this through the lens of skin health. Yep. That's angle and it's radiance and of course how it looks, but it's not just how it looks. It's actually how healthy it is as an organ in the body validating the core biohacking technologies saying, look, no, they actually do work,

Rachel Varga ([09:25](#)):

But you have to stick with the core ones for purification.

Dave Asprey ([09:27](#)):

In other words, if you slather some expensive stuff on your face, but you have rancid oils and bad air and bad water, this stuff isn't going to work.

Rachel Varga ([09:34](#)):

You. You're wasting your time and money. Same with even investing in rejuvenation. So in my last paper, the whole intention of it was to obviously support the biohacking community to understand which biohacks are going to best support the skin, in my opinion, through reducing oxidative distress, basically purification in its fines and also disrupting the aesthetics, cosmetic dermatology, plastic surgery industry a little bit to get them up to where functional practitioners are also running. Because I noticed when I did this, when I first met you 20, I think it was like we first met in 20 12, 20 13, something like that. Yeah. I started to employ biohacking. I was in two car crashes, thank goodness I had been looking after myself to support recovery. So it's always being ready to always be radiant. So the biohacking, when you reduce your oxidative stress status, you're going to be better able to manage stress. And stress is a sign of being alive, right? Absolutely. Key

Dave Asprey ([10:38](#)):

Three dumbest things that guys do to their face.

Dr. Anthony Youn ([10:41](#)):

Okay. One of the dumbest things, let me think. So the first dumbest thing is just using bar soap and water. I, there's so many people where guys just don't care. And I tell you, I've done husband, wife facelift, Dave, and the quality of the skin from the husband and the wife is drastically different. If I do a facelift on a woman who's the same age as her husband, that facelift is going to last literally twice as long result wise as the guy. She has

Dave Asprey ([11:07](#)):

Estrogen. We don't have estrogen to have soft, fluffy skin for men. So that seems like a, what

Dr. Anthony Youn ([11:12](#)):

Is the quality of the collagen in the skin as well. And it's just the fact that if you take care of your skin, your skin is going to be healthier and it's going to be tighter, and that collagen is going to be less denatured and tighter, and the quality of that skin is going to definitely give you the longevity of your result.

Dave Asprey ([11:30](#)):

I have it on good authority that the bar of soap forgets. It was by your butt by the time it gets to your face. So it's okay,

Dr. Anthony Youn ([11:39](#)):

I suppose you could be moving bacteria from down there to your face too. But that I, I've not seen in

Dave Asprey ([11:43](#)):

Study, so forget. So there's no embarrassment or anything like that. I mean, okay, so no bar of soap on your face, by the way. I think I told Trevor Mutual friend that one time and I thought she was going to come across the table and choke me. It evokes this violent thing. And at the time, I might've kind of done that sometimes.

Dr. Anthony Youn ([12:07](#)):

What guy has it?

Dave Asprey ([12:08](#)):

I use proper cleanser and all that crap now mostly because my team yelled at me to make my face look all nice so I take better care of my skin. And it works. It makes a huge difference. And people are taking, Hey Dave, you look so much better. I'm like, yeah, I got a haircut and I wash my face. So there you

Dr. Anthony Youn ([12:21](#)):

Go. The second thing I would say is guys will be too aggressive with their skin. So they scrub their skin too much. You've got acne and they over wash their face. They use alcohol-based toners and astringents. One thing that we have realized is that our skin contains a microbiome just like our gut and that microbiome, there's trillions of bacteria living on the surface of your skin as well. And we are just learning just how important they are. Are they important? Is your gut microbiome to your overall health? We don't know. I mean, I'd say probably not, but we don't know. But we do know that that's there. And when we're overly aggressive with skincare, scrubbing our face too much, I know guys who use humus soap on their face for God's sakes, then you can really disrupt that microbiome and those bacteria, the bacteria in your gut are super important for keeping that skin nice and healthy. So that would be the second thing I think that guys do that definitely will ruin their skin.

Dave Asprey ([13:14](#)):

Okay. I had a problem with that. I had one of those Clarisonic brushes a while ago, and I have a patch of rosacea here that I've mostly IP Id off just from over kind of felt nice to my brain brush your my pores were so smooth and dewy and I dunno, but I don't use that much anymore. So there's over exfoliating washing with your butt soap. And what's the third one?

Dr. Anthony Youn ([13:39](#)):

Third one would be not protecting your skin from skin cancer. Now this is something I know that this can be, we may differ on sunscreen, you and I may, and that's okay. I'll just tell you where I'm coming from. I'm a board certified plastic surgeon. I have seen people come into my office, they say, Hey, I've got this little dot on my nose, and they go to see a dermatologist, they get most surgery, then they come back to see me afterwards and half their nostril is gone or part of their eyelid is gone, their eyelids pull down afterwards. And so yes, I've got dermatology friends of mine who they put on sunscreen and then sit in a basement all day and they still put their sunscreen on. I'm not that type. I do believe that there is a lot of benefit to getting sun, especially early in the morning, circadian rhythms, a lot of stuff that you have been a big fan of.

[\(14:25\)](#):

And I think that there's therapeutic benefits of the sun too. I mean, I live in Michigan and gosh darn it, every February I got to get out of here when I go down south into the Caribbean and we get some sun. But at the same time, we also, I have seen the horrible complications of skin cancer and I do believe it's important to protect your skin, whether you do it physically, whether you do it with a mineral-based sunblock, whatever you need to do in general, I think that there's a happy medium there. I know there's some people, I have a friend of mine who I did his podcast. He's like, Hey, I put lard on my skin. That's all I put on my skin. And I'm like not a big fan of that. And then I got dermatology friends where like I said, they'll slide around sunscreen if they're going to be inside all day. I think that there's a happy medium there where we can protect our skin yet still get the benefits of the sun at the same time.

Dave Asprey ([15:12](#)):

There's definitely some serious biohacking benefits to sunshine without sunscreen. And collagen thickness increases with a small amount of sun exposure, but a large amount damages stuff. So there's probably a healthy dose. But it seems like most of the sunscreens you can buy have a warning label that says, warning, this product can cause cancer. So how do you get around that?

Dr. Anthony Youn ([15:34](#)):

I question some of those. I mean, for me, the way I look at it's, there's two. So when you look at sunscreen, you've got chemical and you've got physical sunblock. So chemical sunscreens are absorbed into your skin when the sun hits, the rays hit your skin, there's a chemical reaction that will neutralize basically those effects. And yes, there's a question of whether that may create some free radicals in that process. There are certain chemical sunscreens that I'm not a fan of. Oxybenzone and octinoxate are believed to be hormone disruptors. There are also believed to potentially disrupt the coral reefs. And so I recommend people avoid those. But there are other sunscreens like Mezo xl, like Benzene and the physical sunblock like zinc oxide and titanium dioxide that I do believe in general are safe. And once again, I am completely understanding that there is, I think a therapeutic benefit to the sun.

[\(16:24\)](#):

It's trying to once again reach a happy medium there. Because once again, I am afraid for one of my favorite actors, Hugh Jackman, I think he is the most talented person in Hollywood, and he has had multiple skin cancers taken off this face at some point, hopefully not. But at some point, one of those may be on his eyelid or his nose or somewhere that could permanently disfigure him. My favorite singer of all time, Jimmy Buffet recently died from skin cancer. So I'm very well aware of the dangers of it, and I really believe that we have a happy medium there somewhere where you can get the benefit of it yet not necessarily get the potential harmfulness of it

Dave Asprey ([16:59](#)):

Too. Sunburns are bad no matter what that we can all agree on.

Dr. Anthony Youn ([17:03](#)):

And that's free radicals and inflammation that will damage your skin from both of those.

Dave Asprey ([17:09](#)):

One of the things I've noticed over the past 12 years, I don't eat any omega six fats other than if they're found in beef or something. So nothing canola, nothing soy, nothing safflower grape seed, even avocado oil. Nope. Maybe a table spoon of olive oil on some days. And that means that my cell membranes, especially in my skin are saturated. It's really hard for me to get sunburned. It's like I have natural suntan. And this is something that I first noticed actually 15 years ago from cutting omega sixes. And I just found a study, it popped across my desk this morning, not in preparation, this just randomly. And it was showing that consumption of omega six fats inhibits melanocytes, which are the things that give you a tan in response to sun. So it feels to me like there's a nutritional component that also makes you more susceptible to the sun and that people who have healthier cells probably handle sunlight and maybe benefit more than people who eat corn dogs and live indoors all the time and come out for 20 minutes to get sunburned. So it's very nuanced, which is why I like your book actually, because you're going through and you're making things as simple as you can. What are the three dumbest things that women do to their skin?

Dr. Anthony Youn ([18:28](#)):

I think number one, from what I see is the exact opposite of what guys do. They overtreat their skin. So I get people who call me or who message me, or patients of mine who say, my skin is so inflamed, I am breaking out and stuff. What should I apply onto my skin to make it better? And the first thing I tell them is, what are you putting is and what are you putting on your skin? And they give me a list of all these products and the first thing I tell 'em is, look, get off of all the products first and go back to the basics. Go back to cleansing, go back to using an antioxidant serum every morning and then really limiting to that's all you do in the morning. At night, apply a cleanser. If you want to apply an anti-Asian cream like a Baku or retinol, then feel free to do that.

([19:11](#)):

But get rid of all this other stuff. Get rid of the fragrances and any of these products that are filled with fragrances, look at what are the ingredients of these products Because most likely the reason why you're inflamed could be that you're using way too many products on your skin. And so that's one of the things I recommend in my book is, Hey look, let's get to the absolute basics. You don't necessarily need certain things like toners. You don't need to apply a moisturizer to your skin. If you've got oily skin, then why are you applying a moisturizer over it? You don't need to. You've got natural moisturizer. And so it's really getting with those basics a lot of times. And then we do that and then people find that their skin looks better afterwards because they have been actually overtreating it and putting on unnecessary products and chemicals and fragrances that would just irritate their skin.

Dave Asprey ([19:57](#)):

Okay, so number one, too many products with tooty weird chemicals and especially fragrances. If you can smell your skincare stuff, it doesn't have actual essential oils in it, then it's probably the wrong stuff.

Dr. Anthony Youn ([20:07](#)):

Even essential oils can be irritating to the skin. And so there's some people who think, oh, well, they're just essential oils. And I tell 'em, look, they can be irritating as well. And when you have other fragrances, the problem is you don't know what's in those fragrance. When they say fragrance, that could be basically a company's proprietary information. They don't have to share that with you. And so that's something just to keep in mind. Ideally when you're looking at skincare, some people think, well, natural essential oils, let's just put essential oils in skincare. But that can also irritate too. So just go fragrance free. That's usually going to be your best bet. So the number two thing I would say is relying too much on procedures and thinking that a little is a good thing. So a lot is an even better thing, and that's what we see all the time, whether you're dealing with Botox, whether you're dealing with injectable fillers, I mean all these people with pillow faces out in Hollywood, once again, I wrote one of these seminal papers on 3D aging and the fact that we want to add volume, but the amounts of volume people are adding now, it's just absolutely insane and it's making people look just not like real people.

([21:10](#)):

So that would be the second thing is actually overdoing the procedures that you think are going to make you look younger. And in the end, there are people who are actors and actresses in Hollywood who are in their twenties and they look like somebody who's 50 trying to look like they're 20 because they've had so much work done.

Dave Asprey ([21:27](#)):

Wow. Okay. So overdoing work and then overdoing, cleansing. And the third dumbest thing,

Dr. Anthony Youn ([21:33](#)):

I think the third dumbest thing is not paying attention to your diet. One of the big things that people don't realize is that the quality of your diet profoundly affects the quality of your skin. And there are studies that are being done showing that the health of your gut can really impact the health of your skin. And it's the gut skin axis that we are just learning more and more about. So for example, there are skin conditions like you mentioned, rosacea, eczema and acne that have definitely an origin a lot of times in the quality and the health of the gut. So doing something very simple like eating fermented foods, taking a daily probiotic can actually make huge impacts on your skin. There's so many people who go through life thinking that, oh, well I can eat fast food, I can eat all this sugar, but if as long as I use my skincare process, I'm going to look young. And that just is not the case. The way I describe it really is that that's the foundation of youth and anti-aging is going to be what you put in your mouth.

Dave Asprey ([22:31](#)):

Does undereating affect women's skin?

Dr. Anthony Youn ([22:34](#)):

I think it does. And you, I'm a big fan of intermittent fasting and I was definitely influenced by your Fastness Way book. But at the same time, I do think that the problem with fasting is are you going to get enough protein? So undereating, thanks for saying

Dave Asprey ([22:49](#)):

That it's such a big

Dr. Anthony Youn ([22:50](#)):

Is concern. So I think when you're as, especially as women get older and especially as it go through menopause protein is so, so important and eating sufficient protein. So definitely the benefits of intermittent fasting I think are huge really with hormesis. With autophagy and the fact that that can really help with your skin. But at the same time, collagen is a protein and you need to get enough protein in order to support the collagen. I think that's so, so important. And the problem is can you get enough if you're intermittent fasting every day, so in my book what I start with people, we have a 21 day jumpstart and for first week we don't have them intermittent fast at all. And the weeks two and three, we have them intermittent fast, but just two days out of the week to kind of start them up and that way they're still eating a lot of protein for the rest of the time. And then focusing really when they eat intermittent fast and they refeed

Dave Asprey ([23:44](#)):

Actually on

Dr. Anthony Youn ([23:45](#)):

Foods that are actually going to help promote autophagy as well.

Dave Asprey ([23:51](#)):

I wanted to educate listeners about glutathione. It's something where if you go way back in time when I had heavy duty mold toxicity, I got some IV glutathione, some early really bad tasting liposomal and it

really helped me get my brain back. And when I travel, I'm all over this stuff. So what is important about glutathione? What do we know today? We didn't know 20 years ago.

Dr. Nayan Patel ([24:15](#)):

So we knew 20 years ago that glutathione was important to us, but what we did not know is how can we deliver to a body effectively? We were injecting IVs, we were taking the liposomal form of Gath Hyde and it was actually improving levels, but not the reason we think the way it was. We thought it was absorbing correctly because we are infusing into the blood. If you're taken by mouth, it was absorbing slowly and we are seeing the results. But in ity it was not absorbing at all. It was breaking down the glutathione and the amino acids that were created were reabsorbing and they were recreating those glutathione back into a system using those amino acids. So it was working no doubt about it, but not the reason we thought it was for or by being merely absorbing slowly. Now we know that part that it was not absorbing at all. It was actually breaking down and reconstructing again. But now we have a technology, we have a technology that can change that whole process and don't have to depend on body to absorb it. Keep in mind the last 15 years ago we were not doing gene testing. Now we're doing so much gene testing, we are finding out people have all these mutations that their body is not able to reconstruct or deconstruct glutathione. Then what happens?

Dave Asprey ([25:41](#)):

Wow. Okay. So how many people in the population have a hard time either making a recycling glutathione?

Dr. Nayan Patel ([25:51](#)):

Well, we have a very small database right now for the last 15 years. What we have found out people have those gene mutations, they're roughly about 2020 5%, which is, it's actually a big number. But at the same time, on the flip side, 70, 75% of the people have no issues. They can take gluton whatever forms they want to take it and still get benefit out of it.

Dave Asprey ([26:12](#)):

I find that I have problems with sulfur metabolism because of my COMT genes. So even though I probably shouldn't have too much sulfur, I also could, some does not have enough. And I've taken things like MSM, which is a thing that can help because it has extra sulfur in it. Even collagen is a high sulfur protein and glutathione high sulfur. Can you talk to me about sulfur versus glutathione and how would you know that you need glutathione?

Dr. Nayan Patel ([26:41](#)):

Oh boy, you are right. If has a gene defect, what you'd explain to whether it was COMT, those patient populations will definitely benefit from some sort of glutathione formulations. But the simple test today is you can do a blood test and literally check your RBC levels of glutathione. If we measure whole blood, what we do know is the whole blood level of glutathione is actually not good for us because what we are measuring is the both plasma and the red blood cells and the plasma levels of glutathione has a very short life in your body. It's about 14, 15 minutes. So it's not a true test of your true glutathione levels. We measure the RBC levels, I think you'll get a true levels of glutathione in the RBCs and we can do those tests. In fact, we are working on test kits right now where we'll be able to do at-home test kits for glutathione. It's not ready yet, but we are working on that right now because as you might know with

the lab testing, it just takes a long time to get the FDA approvals. But once we have that we'll be able to measure blood spot tests at home and check your levels of glutathione. Wow.

Dave Asprey ([27:51](#)):

So no one has that yet. Interesting. I've seen some glutathione. I've seen it measured in labs so far. It's not red blood cell though. What are they measuring? Plasma

Dr. Nayan Patel ([28:02](#)):

Whole blood. They're measuring whole blood.

Dave Asprey ([28:04](#)):

What's the difference between red blood cell versus whole blood glutathione?

Dr. Nayan Patel ([28:08](#)):

So the whole blood is plasma and the red blood cells, the plasma half-life is very short. So when we want to measure glutathione, we spin the blood, take the plasma out and just measure the red blood cells. If you just measure that part has a little bit longer life in your body, so it gives you a little bit better marker as to what your body levels are.

Dave Asprey ([28:31](#)):

Okay. What are the times of day that someone would want to use glutathione?

Dr. Nayan Patel ([28:36](#)):

So the glutathione is actually used, I mean from external sources. The life is very short. The best product that we have in our market that we have right now, it stays in a body from anywhere from four to six hours, eight hours. If you've repeated use, make it to 12 hours. So if you're using it twice a day would be ideal. Morning and evening is most of the people will use it twice a day, morning and evening.

Dave Asprey ([29:02](#)):

Okay, morning, evening, what is the best way to use it? This is something that if people saw the last podcast that they might've picked up on, but this is groundbreaking stuff. So I'm going to give a little bit of history before you answer that. We talked earlier about stinky bad breath, rotten eggs, liposomal, we've talked about IV and there's precursors and taking vitamin C. There's all kinds of different ways that I've tried like that and almost any of them I notice if I'm flying I have less jet lag or if I have a toxic thing, I have less dark circles and things like that, or less acne or something because of the toxin effect. But I don't know how to stack rank which ones work better, which ones get glutathione into my cells or my brain or my liver. So what is the best way that you have found for people to get their levels in a way that works systemically?

Dr. Nayan Patel ([30:03](#)):

So Dave, I'm biased because I've been, I have a product now, so it is the best. But again, I've made liposome technology products in the past. I used to make the IV glutathione for 20 years plus and I stopped making all those products when I discovered the topical version of the glutathione 15 years ago. And it took me 12 years before I launched the product to the open public because I had to make sure that it was not just better than the other products out there. It is far more superior than anything that's

out in the market to date. So after my research today, we do know that topical absorption of glutathione is there. It is proven. We have done human trials on that to back it up and it is by far the best technology that we have to today to deliver glutathione completely intact without getting denatured and your body has to reconstruct them again.

Dave Asprey ([31:05](#)):

Alright, soft wave. There's another thing you can do for your face. Tell me about soft wave. This is the one I did on Instagram.

Dr. Rob Whitfield ([31:12](#)):

So this uses ultrasound to work in the first couple of millimeters and you're really stimulating through the ultrasound technology, more collagen production. So the audience knows that collagen is this huge molecule. The fibroblasts are the cells that make it in our body and it's going down we'll say after our late twenties, early thirties. And through diet, through just its production in the skin. You want to do what you can to stimulate it. So basically all the tech I have, the millions of dollars of tech we have in the office that you've been to in Westlake Hills is all meant to stimulate that in a way to get a response for skin tightening, more production. Those are the things, and this is another noninvasive way to do that. So there's really no downtime with it as you experienced.

Dave Asprey ([32:01](#)):

Yeah, it was actually really cool. I went in the afternoon and you smeared some numbing stuff on and went to town and it felt hot but not unbearable. I mean it was noticeable but it was well with intolerances and then the next day maybe a little bit puffy and then after that it was nothing. But

Dr. Rob Whitfield ([32:21](#)):

It was super low downtime with something like that. And that's another noninvasive way to get an improvement. And for everybody listening, these are ways to just help yourself. They're not meant to be completely standalone draw line in the sand therapies because it's not like that. Nothing's going to do that.

Dave Asprey ([32:43](#)):

You can't just go in one time and everything's done. It is kind of a composition, sort of like, I want to play music so I just have drums. It's not going to work. No, and there's

Dr. Rob Whitfield ([32:53](#)):

Way more involved.

Dave Asprey ([32:55](#)):

There's also other technologies that people use similar to soft wave. I dunno, compare it with lasers or IPL.

Dr. Rob Whitfield ([33:07](#)):

I'm glad you thought I brought up lasers. So lasers have been around forever, right? So there's IPL, which is really meant to manage, we'll say pigment.

Dave Asprey ([33:16](#)):

Yeah, I've used ipl,

Dr. Rob Whitfield ([33:17](#)):

Right? So I like IPL and we've used it for you. I think I've steered away from ablative lasers for the listeners because those damage the skin. The target is the water, basically the crumbo force water for like a CO2 laser, so that's an ablative laser. Other lasers work in microns. So one millimeters a thousand microns and just pages of the book you can dial up how many microns you can take away, but that's really damaging. You're like you're doing a controlled burn. So I'm not a huge fan of controlled burns or anybody burning me. So I've steered away.

Dave Asprey ([33:59](#)):

I've seen people who look great a year after a laser and then five years after things are not good. I've also done laser microneedling where using a laser just heat up tiny little spots and that seemed to be effective without causing a lot of damage to the skin.

Dr. Rob Whitfield ([34:15](#)):

Yeah, that's better than a global just

Dave Asprey ([34:18](#)):

Kind of potato peeler laser.

Dr. Rob Whitfield ([34:22](#)):

You create fragility over time in the skin when you use something.

Dave Asprey ([34:25](#)):

And that's with laser ablation. IPL is different. That targets the pick just the red stuff. And I needed IPL because actually a while ago, those vibrating facial brush things like a Clarisonic, one of the early Clarisonic employees worked for me when I was running Bulletproof and she was such a fan and now she runs Thrive Cosmeceuticals and she's just a great employee. I remember she came when she decided to go, she's like, Dave, this is the best job I've had, but now's my time. I just got on Good Morning America or something. So I think right now Thrive is probably bigger than Bulletproof. So congratulations Carissa. And what you're going to find is if you do that exfoliation stuff, that's awesome. But I was just doing it every day. I thought my skin looks good and after a while I got redness. And so the IPL got rid of the redness from me over exfoliating. I had a cool brush thumb, Clarissa. Yeah, right.

Dr. Rob Whitfield ([35:26](#)):

So you have to, with Exfoliants, especially retinols and things like that, you have to be judicious based on their strengths. You will build up, you're basically burning yourself over time.

Dave Asprey ([35:37](#)):

Should I be using Retin A cream?

Dr. Rob Whitfield ([35:40](#)):

You can. I like things that are going to increase the barrier, hydrate the skin OIDs are really popular right now. Things like some of the C 60 things that are going to help the skin. C 60 topically, it's a lipo C variant, it's like C 60, but for the skin topically, all the biohacking for skincare is much, much more advanced now. So I see a lot of runway for that for both preparatory and just for longevity treatment of the skin.

Dave Asprey ([36:12](#)):

I do believe there's a lot we can do topically, including the one skin stuff. I had them on the show a couple of times talking about the science of that one peptide OS oh one. I think that stuff works pretty well. What do you think about that?

Dr. Rob Whitfield ([36:26](#)):

Yeah, I agree. I think those are the most exciting things and I always like you understand about me, I ever remain curious about anything that's going to help our clients have longevity and their skin have longevity. So we look at those and try to get the best in class, if you will, for our treatments for preparation and then certainly for post therapy,

Dave Asprey ([36:48](#)):

Morpheus eight, good or bad.

Dr. Rob Whitfield ([36:51](#)):

So anything that I consider it to, it creates an injury, it opens the skin, allows you to deliver molecules effectively.

Dave Asprey ([37:00](#)):

What is it?

Dr. Rob Whitfield ([37:01](#)):

So it's a micro kneeling device that uses radio frequency.

Dave Asprey ([37:04](#)):

So a needle goes in and then a little radio frequency comes through the end of the needle, essentially like an antenna? Yeah.

Dr. Rob Whitfield ([37:10](#)):

Pops back towards the face plate. So it's bipolar radio frequency. So I've used that since 2018. I think it was the first person in Austin to have it. And I do like it. I think it's good for texture, pore size, things like the acne

Dave Asprey ([37:26](#)):

Scar. And I haven't done any of that that I'm aware

Dr. Rob Whitfield ([37:28](#)):

Of. No, that's like what is part of a treatment plan that makes sense. Anytime you poke a hole in skin anywhere on the body, it's going to stimulate the response to heal and promote more collagen synthesis. So that's really, if you want to make it baseline, that's what it's really there for. And then when you open the skin, you can add more molecules and biohacking molecules are all over the place that we could add.

Dave Asprey ([37:53](#)):

No kidding. Right. Okay. I have a lot of listeners of the show who've lost weight. I have sometimes they stop me in the street, like Dave, I lost 50 pounds, I a hundred pounds and I always appreciate it when you even just see me just like tell me my work helped you. It makes me happy. But they ask about loose skin all the time. And right now, no cut facelift or I guess you call mine a no cut but lift. That's right. I think I still have a little extra skin back there. It seems like it would take a lot of treatments to get rid of the amount of skin that I probably have. What, 16 square inches of extra skin from being as obese as I was. I mean, I'm a 33 inch waist. I was a 46. Yeah,

Dr. Rob Whitfield ([38:36](#)):

It's amazing what you did with your abdomen and then the laxity really appeared in your love handle.

Dave Asprey ([38:41](#)):

I'm kind of lucky I didn't all hang down in the front. I'd rather have a spoiler than a front spoiler. I'll put that right. And

Dr. Rob Whitfield ([38:50](#)):

To Dave's credit, he did not want me to do a open procedure and excise that tissue and make a mustache incision on his backside basically and give him a butt lift. But you can repeat the procedure I'm describing because it works and it takes skin without leaving his scar. Now it takes longer to get to the end point, obviously, but it doesn't disrupt his blood flow, really, his lymphatic drainage and leave a visible scar that then creates problems with energy in his body. So anything that I can do to help somebody get to that endpoint without visible scarring.

Dave Asprey ([39:26](#)):

Should I get a BBL L? Talk to me about BBLs.

Dr. Rob Whitfield ([39:32](#)):

Oh Jesus. Oh, the BBL L. We have the BBL L king in town. It's not me. I'm the Brazilian breast lift guy. So I take out old implants and I put the fat there. Oh, okay. Got

Dave Asprey ([39:43](#)):

It. But talk to me about BBLs. I know they're the most dangerous procedure. That's not something you do. Oh right. Not something you recommend. Yeah, so it's funny, I wouldn't get one obviously, but so

Dr. Rob Whitfield ([39:55](#)):

It's been around for ages and many years ago when I was working in one of the societies, there were deaths and they found deaths in Miami and la and it was basically from, we'll say fat being injected in the wrong areas. It was getting into the bloodstream via the veins and going to the heart and people

were dying. We wrote a safety paper about how to do it safely and the instrumentation. And it's been much, much more advanced now to where you just are putting fat in the fatty layer and not in the muscle layer, and obviously avoiding the large blood vessels around the buttocks. And it's not a complicated or unsafe procedure to have performed. It needs to be done in the proper setting by the properly credentialed providers.

Dave Asprey ([40:45](#)):

So I have not researched, you see all this stuff on TikTok and so where do they get the fat for that?

Dr. Rob Whitfield ([40:55](#)):

Yeah, so when I take fat out to do the breast, it's the same as when we take it out to do the buttocks. Where do you find it? Inner outer thighs. Love handle areas, abdomens. So when you're doing a buttock treatment, you start with the patient laying flat on their back and do their abdomen and or other spots that you get to if you're doing anterior thighs or something like that. And then you turn them over because the patient has to be in the position on their tummy. You're going to finish by injecting the fat in the buttocks. So then you're going to contour the entire waistline. Where were we taking skin out of yours? You had already lost the fat, but there you would take out all the fat. So you'd already give the impression that the buttocks has a better contour.

Dave Asprey ([41:36](#)):

So you'd pull the fat out of the low back and stick it in the butt. Yep. Got it. So that would be like a corset kind of effect. And you're saying that when it's done properly today, it's not unsafe. So women, if that's what you want to do, you could. Yeah. What are the downsides of that?

Dr. Rob Whitfield ([41:51](#)):

I think the recovery period is always the thing that bugs everybody. You really can't sit on it for the first several months.

Dave Asprey ([41:57](#)):

Wow. It's just laying your walk around. So

Dr. Rob Whitfield ([41:59](#)):

They sit on their stomach or they have, I was giving a talk at a meeting in Columbia, in Cali, Columbia, and they had a pool toy that had your butt cut out of it and you would sit at it like you were sitting in the floaty at the pool.

Dave Asprey ([42:15](#)):

It might just be more biologically useful to do your squats. I mean, I don't want to sound judgy here, but

Dr. Rob Whitfield ([42:22](#)):

Well, I breast surgery for

Dave Asprey ([42:23](#)):

A reason. If you eat enough steak, not plant protein, sorry. And then you do a meaningful amount of targeted work on your butt, you can generally grow a butt for

Dr. Rob Whitfield ([42:33](#)):

Sure. I mean, over time everybody should understand you're going to lose muscle mass over time. I think Dave's already talked about it on the show many times. You want to eat a lot of protein and lift heavy things.

Dave Asprey ([42:44](#)):

There you go. Now you just put the king of BBB out of business. Alright. Have you ever had someone get a no cut facelift who just hated the results?

Dr. Rob Whitfield ([42:57](#)):

I have had folks who I've told that a facelift, a traditional facelift or a no cut facelift would not give them the amount of change over time they wanted because their skin is already kind of aging at a more rapid rate than anybody can deal with. So if you did a facelift, that person would age out on a facelift within two to three years probably. And a no cut really is a much less aggressive treatment, obviously. So the appearance change is not going to satisfy that person specifically. But I would give them the concept you're trying to remove, like we discussed in your case, skin over a period of time to keep up with what's happening. Because aging's a dynamic process, it's not going to stop if someone's aging at a much more accelerated rate. Maybe their telomere length is not good, maybe their epigenetics is poor. Maybe they didn't pick their parents right? Maybe they eat a terrible diet, they live in a place with mold. All these different factors contribute to how they age more rapidly.

Dave Asprey ([43:58](#)):

You are listening to the human upgrade with Dave Asprey.