



1078: How I Build Sun Tolerance & Solar Callus
in Early Spring (Solo Episode)

Child: Welcome to my mommy's podcast!

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So together, they cover the full picture of gut health, and ninety days is the sweet spot where a lot of people really say they start to see the difference really tangibly. So that's why I am encouraging you to try this for the full ninety days and made this offer where you are able to get both for ninety days.

Give it the time it needs. They back every order with their money back guarantee. There's genuinely no risk. And you can use this link to get this personalized deal that's not available on their main website, which is get.justthrivehealth.com/pages/wellnessmama. I know that's long. This will be linked in the show notes as well.

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Most supplements, even the high quality, expensive ones only contain one to two forms at best, and that's like trying to build a house with just a hammer and a screwdriver. You need

the complete toolkit, and that's why I started taking Magnesium Breakthrough from BIOptimizers, which contains all seven forms.

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Plus, when you subscribe, you'll enjoy exclusive discounts, free gifts, and a guaranteed monthly supply. All natural ingredients, no synthetic additives or preservatives and always vegan, gluten-free, soy-free, and lactose-free.

Hello, and welcome to the Wellness Mama podcast. I'm Katie from wellnessmama.com, and this episode is all about how I build a sun tolerance and a solar callus, specifically in early spring, though you can do this to some degree any time of year. and we'll talk about why I personally feel like sunlight is essential for every aspect of health, not just vitamin D production, but hormones, energy, mitochondria, sleep, and a lot more.

What a solar callus is, how to safely build one, why people burn easily. It's not just genetics like you might think. so much more that goes into that. Before we jump in, though, I wanna reiterate something important, which is nothing I ever share is medical advice, health advice, or even personal advice.

I am simply sharing my own experience, the things I've learned, and ideas I-- that have been helpful to me on the way. My goal is to offer inspiration and information, never comparison, pressure, or prescription. You are and always will be your own personal healthcare provider, and I encourage you to always be curious, to do your own research, to question everything, including and especially me.

And if something resonates, awesome. If it doesn't, please, of course, leave it behind and discard it. My deepest hope is that any conversations I have here just help you to, connect with your own wisdom and figure out your own best next steps so before we jump in, I want to, like, put the caveat of I think this is actually one of the most important pillars of health.

And I think this one is being talked about more, but still gets overlooked for how important it is. And as a starting endpoint, most people burn not because the sun is bad or even technically because they're getting too much sun or they're getting too much for their ability at that moment, but why is that?

And when we get to the root cause and ask those questions, we find out things about internal terrain, what makes a difference in someone's sun tolerance. I found firsthand that

sun tolerable is trainable, and I reject the idea that any color of skin is, any color on your skin, any melanin at all is sun damage.

I know this often gets talked about, especially by, people in the beauty industry or dermatologists, that any, any skin exposure to the sun, any color whatsoever is skin damage. I personally completely disagree with that statement. We'll talk about the benefits of melanin a little bit more below, but it's so much more than just a pigment on the skin.

It's really cool. We're finding out it's a light storage molecule, a quantum signaling molecule, a protective antioxidant, lots of cool things. so I personally blatantly reject the idea that any tan is a bad tan. Personally, not medical advice. but also the concept of a solar callus, why the gradual strengthening of the skin's natural protective systems, can be really beneficial over time, and why modern indoor life makes so many of us lose our tolerance.

That was true for me for many years. A few years ago, a couple years ago actually, my sun tolerance got the highest it's ever been. And then I had a whole lot of stress last year, a pregnancy. I'm now postpartum, and I am now getting to go through some of these steps myself to rebuild my sun tolerance, my mineral levels, and lots of other things after a very stressful year, which is a whole separate episode I hope you'll listen to as well.

But the body, as always, has a wonderfully intelligent relationship with the sun. You're probably tired of hearing me say that your body is always on your side, it's your best friend, and it's always doing what's in your best interest. So if something's not working, it's because either your body has too much of something it doesn't need or doesn't have enough of something it does need.

Same thing with the sun, which almost every organism on planet Earth has a relationship with, which animals gravitate toward and flowers turn to face, and water has a relationship with. it makes sense that humans, as animals as well, would have an intelligent, important relationship with the sun. and the sun is not just UV.

I feel like the reductionist idea of just reducing the sun to UV, to vitamin D, to skin damage, to et cetera, that we've lost some really important caveat understanding and knowledge when it comes to sun exposure. The sun is full spectrum. Very small amount of it can we actually see. It also contains IR, infrared, which builds structured water.

It restores redox. It prepares the skin for UV. It does all kinds of things. there's also red light present at sunrise and sunset. There's UV present only during the middle of the day in different amounts, and I purposely actually seek out UV. We'll talk more about that later, but part of my goal is to increase my sun tolerance and get as much UV as possible, because the best I have ever felt in my life was when I was getting the most sun exposure.

I do find that was a vital piece for me personally of reversing autoimmune disease, and I feel like it's a missing piece for a lot of people in health. morning sunlight also increases melatonin or melanin production and melatonin production in multiple ways. But a cool fact here before we move on is that getting morning sun exposure, especially around sunrise, sort of works as a natural sunscreen.

At least this has been my experience, and I hear from many others as well, and this is because it works with our biology and the intelligent relationship we're meant to have with the sun. Your body then knows what time it is. It knows that it's sunrise, so it knows when it's going to be bright midday, and it prepares accordingly hormonally to protect you from sun exposure.

Humans have historically lived in nature, obviously much more than we do now, gotten tons of sun exposure, not died at huge rates of skin cancer, were not, did not wear sunscreen for most much of human history. I feel like it's at least worth, worth asking the questions that why do we as a population who live indoors more than previous populations, wear more sunscreen than previous populations?

And there's a whole lot of other factors there as well, but why do we get more melanoma than our previous populations? Sure, there could be an element of testing here, but when we look at the data, that's not what actually stands out. and my personal opinion is it goes to some of the things I'm gonna talk about today, because sunlight sets circadian rhythm, hormones, metabolism, and our serotonin-melatonin cycles.

This is why many people who adopt a circadian lifestyle are shocked by how good they feel. And I have gotten so many messages over the years from people who heard me say over and over and over about the sunlight and about being your own primary healthcare provider and get outside as much as possible and do these steps that we're talking about, who are like, "I can't believe I didn't do this sooner.

I feel so good." But let's talk specifically about burning because that's what people wanna avoid. I agree. I do not recommend anyone burn ever. but burning happens when UV hits our skin without these protective inputs or in an amount that exceeds what the body's current capacity is. So that begs the question, what are the protective inputs, and how do we expand our body's capacity to handle UV?

And that's where solar callus comes in, at least partially comes in. So what is a solar callus? As the name would suggest, just like a callus on your hand, it's a gradual adaptation that offers us a protection of sorts. so with weightlifting, you'll get calluses on your hands. They let you have less discomfort from lifting over time because you have calluses to protect your skin.

A solar callus is built slowly through, in particular, morning sunlight exposure, and this is a category where the more the better. I used to, prioritize when I was trying to heal, just seeing the sunrise even if I fell back asleep after. now I really feel like the more the better of morning sunshine.

So if I'm able some days to be outside gardening, taking care of the animals, eat breakfast outside, drink coffee outside, everything I can do outside in the morning makes a huge difference. And then gradual midday UV exposure. This is where I feel like a lot of people could easily get it backwards, especially people who don't often get full-spectrum sun exposure throughout the day but then go on vacation to a sunny area and get midday sun exposure 'cause that's when it's fun to be outside

So even if your inflammation is low and the other things we're gonna talk about, if-- or even if I, after the winter, jump straight into midday sun exposure without these other protective steps, I would likely burn. The inverse of that is me of Scottish heritage, who used to burn in five seconds at high school, when I get morning sun exposure and do these other things I'm talking about and build a solar callus, can now, living in a Florida beach town, spend the whole day outside without burning if I've done these things correctly.

That's my anecdotal experience. I'm not saying the same would be true for you. I am saying for me it's been worth questioning, and the results have been pretty astounding. I've also found personally, there is an internal nutrient sufficiency component, and I feel like this part is often missed. It's not just the inflammatory things that we're exposed to.

Of course, those are a factor as well. but it's nutrients, it's minerals, it's having the right ranges of those things. There's various ways to do that. I've done a whole series on minerals. I can link to those in the show notes below. things like hair mineral analysis can also help with dialing that in specifically.

But for many people, it's just getting more of the important minerals, getting fat-soluble vitamins from food, getting micronutrients across the board from food, really just increasing our nutrient status by consuming high-nutrient foods. And then mitochondrial redox capacity, which all of these things also contribute to.

Light is a huge factor in that, as is hydration and even things like our stress levels. so we'll go more into that as well. When we build a solar callus, we reduce our sunburn risk But we also reduce our oxidative stress levels that are measurable. We also often reduce skin inflammation. So anecdotally, I hear from so many people who had inflammatory skin conditions like eczema or whatever it may be, who s- got a lot better from getting these sun pieces right and building a solar callus.

So skin inflammation and then histamine response. They are still working to understand the pathways, but I hear this over and over as well. People who have histamine problems often notice really positive changes from really focusing on this light element and really maximizing sunlight exposure at all the parts of the day, especially morning sun exposure.

A solar callus also helps us increase our vitamin D synthesis. Again, vitamin D is not the only thing to think about when it comes to the sun, but it is a big one, and I've shared before how taking vitamin D orally did literally nothing for me. It made me worse. I had very low levels. I took it for years.

It did nothing. And when I got these pieces right, I got more sun exposure, I built a solar callus. My vitamin D now reliably stays in the 80s even after a pregnancy. So I'm personally a believer on this, but as well as a solar callus helps with our stress resilience and our hormonal balance because there's a whole hormonal interplay that happens with light, and it helps our neurotransmitters, it helps our sex hormones, it helps literally everything across the board.

But to understand why this matters and how to fix it, let's talk about why people burn, the internal physics of what's going on. One component that could be going on, and if you may totally disagree with me, if you're from the camp of, sun is bad, skin cancer is too scary, sunscreen is the only way, I respect entirely your opinion related to that.

If you're interested in continuing to listen, I would encourage you to just potentially in-approach these things as a thought experiment with an open mind. I was skeptical at first too. That said, the internal physics of what's going on in my understanding is that people might have low mineral levels.

Like I said, I've talked about this a lot, but sodium, magnesium, and potassium regulate our redox capacity. A lot of people are struggling there. Low minerals also can mean low voltage in the body. I've done an episode about this as well, but low voltage means more oxidative stress from UV. So minerals act as-- think of it as like an electrical sunscreen internally.

They also, as I've talked about ad nauseam, do a whole lot more as well. I have seen so many positive improvements from getting my minerals really optimized. There's also a fat-soluble vitamin component, and I first researched my way into this while looking into why my cavities healed. Because I had cavities, and I got pregnant, didn't wanna fill them.

When I moved and then went to another dentist, I no longer had cavities. So I started researching, can cavities heal? And why did mine, since they apparently can. And I read a whole lot about fat, fat-soluble vitamins. Turns out they come into play here as well. So A and E protect the skin from UV damage.

There's a bell curve there. More is not always better. And in fact, with fat-soluble vitamins, I have learned over and over, more is definitely not better. there's also K2. I take K2-7 regularly. I take the one from Just Thrive. I can link to that in the show notes. that supports repair. It also supports calcium getting to the right places in the body.

I think this is a very overlooked one, a big one. It's one that I encouraged both my parents to take in their 70s. I'm a huge fan of K2-7 Vitamin D, which like I said, I get no benefit from orally. That's true for a lot of people who have certain VDR mutations. vitamin D regulates melanin and inflammation, so it's kind of a vicious cycle.

If this gets low, it then gets harder for it to get back up. it, it kind of affects the whole fat-soluble vitamin cascade. It can affect your mineral cascade. It can affect your inflammatory pathways. Now, when your inflammation's high, it's harder to get your vitamin D back up and on and on. So, it's a big deal, and the deficiency of any of these makes it easier to burn.

And because of that, the minerals and the fat-soluble vitamins, it's not an overnight fix. You want to rebuild those slowly and sustainably. Definitely do not ever wanna take mega doses, of any of those minerals. Might just make you have to go to the bathroom a lot. Fat-soluble vitamins can be dangerous.

Always consult a practitioner, of course. But low antioxidants is another one, and this one I found really interesting. So our skin needs vitamin C, glutathione, astaxanthin, polyphenols, a whole range of nutrients that we're not getting from the modern diet. This is part of the reason it goes back to nutrient sufficiency.

The more l- nutrients we get, ideally from local seasonal foods, the better. but the skin needs those especially to have a tolerance to the sun. UVA, generates reactive oxygen species temporarily. This isn't a bad thing. I've talked about this before as well, but the body does make use of antioxidants in this process, and I try to get these from food.

I also supplement with some of them sometime, and a, a random one that helped me a lot when I was first doing this, I would just add a tablespoon of tomato paste to something I ate per day. So even my eggs or whatever it was, or a soup, or make tomato soup, and the lycopene in that seemed to help me personally, with not getting as inflamed from the sun.

Then there is the one I've learned most recently, which is hydration and structured water. So dehydrated tissues have more oxidative stress across the board. That's a pretty common one. Infrared light at sunrise plus minerals helps your body create structured water. The water in our body is structured, so in theory, we could be consuming water, drinking water, but if it's not the right form or it's not readable by our body, we could still be dehydrated even if we were, on paper hydrated from drinking enough water.

But it... when we get the right light plus mineral components going and we have the structured water in our body, we also have a deeper sun tolerance, and the sun helps structure the water in our body as well. So it's a synergistic relationship that builds over time when we start getting this piece right.

Some lifestyle factors that come into play when it comes to solar callus and healthy sun exposure in general. When we're in indoor winter and then jump straight into hot summer sun, it can be easier to burn. That makes total sense to me. We just haven't built the practice. It's like if we didn't go for a run and then we ran a marathon, we could likely get injured or just not be able to complete it, just 'cause we haven't built that skill.

And so that's why I have a whole protocol I personally do to build sun tolerance in the spring. I'll talk about that soon. But also things like sunscreen dependency because the skin, our skin never gets to adapt. I've done podcasts before about my own personal experience and opinions with sunscreen.

I won't rehash those here other than to say I'm not a fan. Another one that people don't think about as much is blue light exposure. I do personally know people who wear s-protection on their skin for blue light, like the studio I'm recording this in right now, but not outside. I don't wear any skin protection in the studio, but I also certainly don't outside, and I actually can see a stronger case for protecting my skin from this blue light that I'm staring at at the moment than from covering my skin in the sun.

Same thing with sunglasses. I've also talked about those before, but sunglasses block the feedback mechanisms that tell us to make enough melanin to help us not get burned. So that is one reason you might be actually more likely to get a sunburn if you're wearing sunglasses. Poor sleep also puts us in, a place where we're making less melatonin.

We can have more inflammation. We get less skin repair. We're more likely to burn. So those are some of the factors that come into play. That said, here is the safe, easy way naturally to build sun tolerance, ideally in the early spring. Obviously, when you're listening to this, it's no longer early spring.

The same thing can work. Just follow the principles of starting slow, starting early in the day. The more early light, the better. Infrared light is abundant there. It's so restorative. You're not gonna burn at sunrise. So maximize your sunrise, sunset time, no matter when you're starting this. Especially powerful in early spring.

Totally possible other times of year. So begin with that sunrise morning light. This, as I talked about, sets your circadian rhythm, builds our capacity for melanin, and also sets our clock for melatonin at night, prepares the skin's antioxidant system, and is almost impossible to burn, at sunrise with morning light.

I'm sure that there are people with, very unique cases that, that is possible, and of course, I'm not encouraging those people to do that. but for the average person, morning sunlight, it's almost impossible to burn and infinitely beneficial. And then gradually add UVB exposure midday. So start with just a few minutes per side.

Add two to three minutes per day. You can do... use apps like DMinder or MyCircadian, which I can link to in the notes, to track the UV index, your safe exposure time based on your skin type, and how much vitamin D you might be generating. You always wanna stop well before burning. I've definitely agreed with all the people who say sunburn is harmful.

I would never encourage anyone to get a sunburn. I try not to as well. Even if I occasionally go too fast and burn, I try to avoid that whenever possible. you also wanna rotate your body, so as much skin area gets in the sun as possible. for the morning sun, really is the most important that your naked eyeballs get in the light, so no glasses, contacts, windows, et cetera, outdoor light.

But it's awesome if more of your skin gets in that light as well because it's so restorative. But for bright midday light, I want personally to get as much of my skin all over my body, as much surface area in the sun as possible for more vitamin D production. And then the factors I mentioned that contribute to this, you also wanna pair with internal support.

So minerals, like I use a lot of adrenal cocktails. I've talked about all the minerals I take and drink and all those in my mineral series. Fat-soluble vitamins, which I love to get from eggs, from organ meats, from liver, butter, supplements when needed, and then antioxidants. Astaxanthin is one I experiment with and take often in the summer, but berries, other forms of supplemental antioxidants if they work for you.

Hydration with mineralized water, and I've been loving living water from Mayu, where you spin the water to wake it back up. And then this one people don't know as much about. When you move and you increase your blood flow, you get better redox and better signaling from the light. So even if you're just gently moving, I often now I'm sure to the embarrassment of my kids sometimes will be just like naked moving in my backyard at times.

They have a weird mom. Apologies to them. but you get more benefit that way. There are some tools and apps, like I mentioned, that can help. The DMinder app or the MyCircadian app, I can link to both of those. That tracks a lot of stuff. It lets you know before you burn, helps you plan your exposure, and helps you build up over time.

You can also use sunrise alarms and light therapy lamps. I will say, 'cause I get this question a lot, I'm not personally a fan of lamps that are supposed to replace sunrise. yes, there are some that are bright enough to get the signaling, and yes, those can be helpful if

sunrise is actually not present, like if you live in areas of the world where there's only an hour of sunlight per day, for instance, in the winter or different situations like that.

So to me, these are things to be used in those adaptive cases, not regularly. What I personally like to do, so I have blackout curtains that go in my, in my room at night, so it is so dark I can't see my hand in front of my face. at sunrise, I have a wake-up alarm that uses only natural light. It turns on the alarm to wake me up, the blackout curtains open, and I go straight outside.

So before screens, I'm outside, even if it's just for a few minutes, but that way I'm not getting woken up by my phone. I'm not looking at blue light. and then I'm getting that light from the sun. You can also sometimes do red light or a wake-up light if needed, especially after being outside. But my thought is always the more sun in the morning, the better.

So my personal spring solar callus protocol that you can adapt if you are just starting that this time of year would be daily morning sunlight. really as much as possible, but even just five to 15 minutes makes a huge difference. If you've never done this and you don't believe me, just give it a month and experiment.

You might be absolutely shocked. the protocol here is just no sunglasses, no sunscreen. Not that you would use sunscreen. as soon as possible to sunrise, ideally within the first hour after sunrise. But if you're waking up after that and you're up with the baby, just go outside when you first wake up and get natural light as possible, as close to sunrise as possible, without anything between you and the light.

Then the part you add in slowly is the midday UV light, and you can start with literally, like, a couple of minutes if you're new to this. My dad's a redhead, so he does only a few minutes, and that works for him. So he is actually building a solar callus as a redhead. But you can start with five to 10 minutes.

If you already tan easily, you can do much more than that, of course. Try to get as much skin area as possible to maximize your vitamin D. Add a couple minutes, literally one to three minutes per day, and use one of those apps to make sure you stop before you burn. and then the parts really within your ability to affect change are those internal nourishment parts as well.

So, getting your minerals and electrolytes, fat-soluble vitamins from food or supplements if needed, fruit and protein to support redox and nutrient levels. omegas from food source only. That's a whole podcast for another day, and antioxidants from brightly colored fruits. I find those help a lot.

I mentioned my tomato paste hack, and then hydration with minerals throughout the day. to reiterate, though, avoid burning at all cost. I am not pro sunburn ever, ever, ever. burning is, is a type of skin damage. It is a type of inflammation. It reduces your tolerance long term because you're hurting your skin.

So stopping early builds long-term tolerance. Going slow is important here. and then go slowly and rest. Don't stress about this. A few minutes a day in the beginning is enough. Slow and steady will get you there, I promise, much faster than long sessions. I did this wrong most of my life, burned all of high school, and built this as an adult and wish I had learned it much earlier in life.

But here's why this approach works so well for me, and I have heard from so many others as well. Sun tolerance is definitely not just about the skin. That's what I didn't understand for so long. It's about mitochondria, minerals, hydration, and timing, especially that morning sunlight piece. You aren't fighting the sun, you're syncing with it.

And when you work with the sun as your biology understands, it adapts really, really well. And it-- this builds a deep resilience for the sun in summer and protects long-term skin health. And again, the best I have ever felt was when I had built this, a couple years ago. I had really strong solar callus, was tanner than I ever thought it was gonna be possible for me to get, and I had so much energy and just felt, like, joyful all day.

And after the toughest year of my life last year, I'm working on rebuilding to that place, and I'm using the sun to help so much with that. This also helps hormone balance, mood, metabolism, sleep. There's not much that it does not help. So closing thoughts. That was longer than I intended. Sorry about that.

The sun is not the enemy. Modern lifestyles disrupt our connection to the sun. You hear me talk about nature deficit disorder. It all comes back to this. with all the caveats I talked about, more nature, the better. We don't have an upper limit on nature. We do have a pathway to follow for sun exposure.

With gentle daily connection, internal nourishment, sunshine becomes a really powerful tool. I put light above food and pretty much every other signal when it comes to health. and build- building our solar callus is not about tanning, it's about restoring natural biology. Maybe I will one day be able to get someone I met at a conference on here to explain.

He talked in depth about melanin and how it is so much more than a pigment. It was absolutely fascinating and quite frankly, a lot above my head. But perhaps when they can come explain it to us. if not, I will say it's not just about the tan. The tan is a wonderful byproduct of feeling even better than you could imagine.

So I'm so curious if you will try any of that, if you already do any of that, what you've found, things that might be helpful that I'm missing. yeah, let me know all of it, and thank you so much for joining me today, for sharing your time, your attention, your presence. It means the world that you're here, and then we get to learn and grow together.

And if you found this helpful, I would be forever grateful if you would leave an honest review. I would never expect an, a five-star review if you didn't feel it, but an honest review wherever you listen to podcasts, which helps other moms and families find the podcast and be part of this community. And if you would love to stay in the loop of new episodes, resources, behind-the-scenes updates, and some of my favorite tips, be sure to join my VIP email list at wellnessmama.com.

Additionally, if you wanna come connect with me on Instagram and YouTube, we have some very fun changes in store. 'Cause it turns out a wonderful side effect of getting to go through my dark night of the soul last year and getting to drop caring about what other people think is there are so many fun new topics that I get to talk about.

So follow along. I would love to see you there. I'm honored that you were here. Thank you for listening, and I'll see you next time. Bye-bye.