## Getting Curious with Jonathan Van Ness & Dr. Emily Newsom

JVN [00:00:03] Welcome to Getting Curious. I'm Jonathan Van Ness and every week I sit down for a 40 minute conversation with a brilliant expert to learn all about something that makes me curious. On today's episode, I'm re-airing an episode from July 2019 with dermatologist Dr. Emily Newsom, where I ask her: Does Sun Protection Have That "It" Factor? Welcome to "Getting Curious." This is Jonathan Van Ness. I'm so excited on this episode, we're going to talk about skin, sunscreen, and what is going on. So to do that, we've got Dr. Emily Newsom, a dermatologist, a literal doctor. How are you?

**DR. EMILY NEWSOM** [00:00:40] Hi. Thank you so much for having me. I'm so excited to be here.

**JVN** [00:00:43] Thank you for coming. So basically, you went to school and then you went to med school and then you became a dermatologist.

**DR. EMILY NEWSOM** [00:00:50] Yes.

JVN [00:00:51] Which a dermatologist is?

**DR. EMILY NEWSOM** [00:00:53] We specialize in anything having to do with skin, hair, and nails.

JVN [00:00:57] Skin, hair, so you're basically the cosmetologists of the doctors.

**DR. EMILY NEWSOM** [00:01:00] Yes.

JVN [00:01:01] Yes.

**DR. EMILY NEWSOM** [00:01:01] But it's not all glamorous, but yes, we do anything, having any kind of rashes or disease of the skin, skin cancer.

JVN [00:01:09] Well, I've got the psoriasis.

**DR. EMILY NEWSOM** [00:01:10] Yeah. So we treat psoriasis.

JVN [00:01:12] We hate the psoriasis. It's very annoying. But really, what I was curious about is I'm always talking about sunscreen and how important it is. And, you know, protecting our skin, etcetera, etcetera. But then just, like, a few weeks ago, the FDA came out and said that it does actually go straight into our bloodstreams. Now, I'm feeling a little nervy that I've been telling, like, everyone and their mom to wear sunscreen all the time. But honey, I wanna keep your skin looking gorgeous. So just wanted to check in on, like the concerns about sunscreen. What you think is great about sunscreen? Like, should I just be, like, taking a parasol with me everywhere I go, should I just be wearing like head to toe, like, body leotards in the sun. Like, what do we need to be doing?

**DR. EMILY NEWSOM** [00:01:49] Yes. So I am obsessed with sunscreen also. And I really appreciate that you spread the word on sunscreen. And it's, it's really interesting, this article that came out. Basically, the FDA did a study because they want to look more into the safety of sunscreen, which is good. We want to get more information. Basically, what the study showed is that sunscreen is absorbed into our bloodstream. You know, it's absorbed through our skin, into our blood, just like a lot of thin-, anything we put on our skin gets absorbed. So.

JVN [00:02:23] So anything we put on our skin is going to get absorbed into our blood.

**DR. EMILY NEWSOM** [00:02:26] Yes. So many things, you know, preservatives from all different creams. You know, if you looked at the blood concentration, you would find it.

**JVN** [00:02:35] So that's how they figured that out is because, like, they tested the blood of the people that used sunscreen, like, four times a day or whatever the parameters were.

**DR. EMILY NEWSOM** [00:02:42] Yes, exactly. Yeah, they had 24 people. So it's a pretty small study. They had them using sunscreen four times a day to their, 75 percent of their body. And then they tested their blood, you know, several times.

JVN [00:02:54] So Q about this blood absorption from our skin. So, like, here's my skin. She's gorgeous. I have hair growing out of her. P.S. Sidebar. I saw this, like, picture of skin under a microscope and I almost threw up. It looked like the Grand Canyon. It looked so nasty. It was so crazy, like, so cavernous and full of, like, deep, deep, very, like, Grand Canyon esque lines. Are you familiar with this, like, microscope look of skin that I'm talking about?

**DR. EMILY NEWSOM** [00:03:23] Yeah. So I use a microscope to look at skin all the time.

**JVN** [00:03:26] What the fuck is all-? So all up close, she's just, like, a big old Grand Canyon.

**DR. EMILY NEWSOM** [00:03:30] It's, yeah, it's a very complex organ with lots of different structures.

**JVN** [00:03:35] So how does this stuff that we put on those canyons in our skin get into our bloodstream?

**DR. EMILY NEWSOM** [00:03:42] Yes. So basically, the, the, whatever topical you're putting on your skin, it just gets absorbed through the skin. And then, we have blood vessels that are right under the skin and it gets absorbed. Now, what's important to note about this study is that it didn't show any harmful effects. It didn't show any toxicity. It didn't show anything harmful. All it showed is that it's absorbed, the sunscreen's absorbed.

JVN [00:04:04] So but, like, there's your epidermis?

**DR. EMILY NEWSOM** [00:04:09] Yes.

JVN [00:04:10] Which is our outer layer, most?

**DR. EMILY NEWSOM** [00:04:11] Yes. Exactly. So that, you have the epidermis, the dermis, and then the subcutaneous fat. And within the epidermis, there's several layers. So the very top layer is called the stratum corneum. That's what protects us from the outside world. So that's the kind of harder layer. When you exfoliate, what you're doing is you're taking off your stratum corneum.

**JVN** [00:04:28] Oh, really? So, like, when I exfoliate in the shower, my stratum corneum is, like, gone?

DR. EMILY NEWSOM [00:04:33] Mmhmm. Yeah. If you, I mean, if you exfoliate a lot.

**JVN** [00:04:35] Wow. Interest. Or just kind of, like, makes it, like, half gone, so it makes it a little smoother or something.

DR. EMILY NEWSOM [00:04:40] Yeah, exactly.

JVN [00:04:41] Like, if you, like, abrazed, like, some of your stratum corneum.

**DR. EMILY NEWSOM** [00:04:44] Exactly. Stratum corneum.

JVN [00:04:45] Stratum corneum. So then what's underneath that?

**DR. EMILY NEWSOM** [00:04:48] So underneath that is, you know, the rest of the epidermis.

JVN [00:04:52] Just layers and layers.

**DR. EMILY NEWSOM** [00:04:54] There's certain layers. Yeah. There's the basal layer. There's the spinous layer, granular layer, and stratum lucidum. So there's, like, five layers.

**JVN** [00:05:02] And then like underneath all the skin, like if you were just, like, to peel our skin back, is it just, like, gross, like, ligaments and bones and stuff? Like, or is it just, like, blood floating around everywhere, like, in there?

**DR. EMILY NEWSOM** [00:05:13] So yeah. So after epidermis is the dermis, which, that is basically like plump pink collagen. And then underneath that is the subcutaneous fat.

JVN [00:05:23] And that's like the yellow-, is that like yellow?

DR. EMILY NEWSOM [00:05:26] Yeah. Mmhmm.

JVN [00:05:26] And then underneath that is it like our muscles?

**DR. EMILY NEWSOM** [00:05:28] Underneath that is the fascia, that covers the muscles and tendons.

**JVN** [00:05:32] So when you were in med school, did you have to, like, literally dissect people? Like, dead people?

DR. EMILY NEWSOM [00:05:36] Mmhmm. Yeah.

**JVN** [00:05:37] Oh my god.

**DR. EMILY NEWSOM** [00:05:37] The first week of med school, it's, like, how you're broken in. You get your cadaver and you start doing dissections in anatomy lab.

JVN [00:05:45] Do you remember your cadaver?

**DR. EMILY NEWSOM** [00:05:47] Yeah. Very well. So we do this thing where you kind of thank the cadaver and you, or that person for donating their body, allowing us to learn. And then at the end of the course, we do a ceremony where we even invite the families and kind of thank them for, like, allowing us to learn.

**JVN** [00:06:03] And then you like bury them somewhere or we cremate them or something?

**DR. EMILY NEWSOM** [00:06:08] I believe that they cremate them.

**JVN** [00:06:10] You're just like, "Bye, Carol. Thank you so much." Like, oh, my God. Emily. Dr. Oh wait. Dr. Newson.

DR. EMILY NEWSOM [00:06:16] You can call me Emily.

JVN [00:06:17] No, Dr. Newsom. Oh wait, actually what do you prefer?

**DR. EMILY NEWSOM** [00:06:20] Either one is fine.

**JVN** [00:06:21] I like Dr. Newsom. It's so major. You know? Actually, no I won't be able to stick to it, I'll just call you Emily. Unless you would prefer Dr. Newsom, then I totally will.

DR. EMILY NEWSOM [00:06:29] Either way.

JVN [00:06:29] It seems like we're cool. It seems great.

DR. EMILY NEWSOM [00:06:30] It's all good.

JVN [00:06:31] So, OK. So but it showed that it wasn't toxic.

DR. EMILY NEWSOM [00:06:34] Right. So basically, their conclusion was we need further study to determine if there is a toxic effect. And the main thing I want people to take away from this is, you know, that we know that the UV radiation from the sun is toxic. It's carcinogenic. It causes skin cancer. So I don't want, my biggest fear with this article is I don't want people to use this as an excuse not to protect their self from the sun, because with sunscreen, we, it's been used for decades and decades and we don't have any good established science to show that it actually causes harm. We should look into it more and we should investigate it. But the alternative of not protecting your skin, we know is extremely harmful. And I see it every day I, I find skin cancer every, every day.

**JVN** [00:07:18] Which really the main aggravate, or is the main cause of most skin cancer, long term sun exposure? Just, like, repeated sun exposure.

**DR. EMILY NEWSOM** [00:07:24] Yes, so it accumulates over time. So the UV damages the DNA in our skin cells and those DNA, those mutations in our DNA accumulate over time. And that's what cancer is, is the accumulation of mutations.

JVN [00:07:35] Oh, yeah. Because then they start, like, splitting uncontrollably or whatever.

DR. EMILY NEWSOM [00:07:39] Exactly. Yeah.

**JVN** [00:07:40] Wow. And then some people are just, like, maybe more predisposed to it. So like the more sun exposure, like, some people can maybe not develop skin cancer from certain side exposure, but then other people would.

**DR. EMILY NEWSOM** [00:07:50] Yes. So some risk factors are, you know, having lighter skin, having red hair, blue eyes, green eyes, like, skin that freckles easily.

**JVN** [00:07:59] Oh, my God, I have that.

**DR. EMILY NEWSOM** [00:08:00] Family history. But, you know, just because you have darker skin doesn't mean you can't get it. It's less likely, but it's definitely possible.

**JVN** [00:08:08] Well, and that is, that is, like, something like that the darker the skin is the, that you don't need to use sunscreen. I feel like I've heard that wives tale a lot.

**DR. EMILY NEWSOM** [00:08:18] Yeah. And that's definitely wrong. I mean, no matter what color of your skin is, you still should protect it from the sun.

**JVN** [00:08:23] And do you think that because of that, like, do, is there, like, an increase in any certain group of people for new occurrences of skin cancer?

**DR. EMILY NEWSOM** [00:08:33] Yeah, especially in the Hispanic community, there's a big rise in skin cancer, especially a type called pigmented basal cell.

**JVN** [00:08:41] And so really, it's just, like, spreading the awareness of like, like we need to use sunscreen because it is. So what do you think are like the safest, least toxic sunscreens out there?

**DR. EMILY NEWSOM** [00:08:51] Yeah. Great question. So, you know, for anyone that is concerned about the chemical sunscreens getting into your bloodstream, I say, you know, if you don't want to use it, that's fine. Just use the mineral sunscreens, which are zinc oxide, titanium dioxide. Those are physical sunscreens. They reflect the UV rather than absorbing the UV.

JVN [00:09:09] Can you explain to us the difference between that piece too?

**DR. EMILY NEWSOM** [00:09:12] Sure. Sure. Yeah. So there's basically two categories of sunscreen. There is the chemical sunscreens, which they were originally actually came from the paint industry. They were to stabilize the paint from, you know, photo changing the color from the UV.

JVN [00:09:26] That's kind of scare scare, a little tiny bat.

**DR. EMILY NEWSOM** [00:09:29] Yeah, it actually came from the paint industry, but this was, like, way back in the day. And then they were formulated for topical use.

**JVN** [00:09:36] Like, softening it and, like, refining the product.

**DR. EMILY NEWSOM** [00:09:39] Yes. So those were, those are the chemical sunscreens and that's things like oxybenzone, avobenzone, and those are the ones that the molecule absorbs the UV.

**JVN** [00:09:50] It absorbs the UV, instead of your skin and then you, like, wash them, the stuff off and it, but is that, were those the chemicals that the study was studying, like, not the physical ones?

DR. EMILY NEWSOM [00:10:00] Yeah. It was only looking at chemical sunscreens.

JVN [00:10:02] And was it both of those two chemicals that it looked at?

**DR. EMILY NEWSOM** [00:10:05] It was looking at four chemical sunscreens, including oxybenzone, which is one of the most common ones.

JVN [00:10:10 Is there, is four the total amount that there is? Or is there actually more?

**DR. EMILY NEWSOM** [00:10:12] No, there's more. So the FDA, they basically came out saying that, you know, the, the physical blockers, which are the mineral based, are, are known to be very safe. And then there are 12 ingredients that they think need more investigation.

JVN [00:10:30] And that's what the FDA said.

**DR. EMILY NEWSOM** [00:10:30] And four of these were, or three of the four were on that list of 12.

**JVN** [00:10:35] And then what does the EU say about, like, the European Union-? Because I know that the European Union, and European Union and then Canada have a lot of, like, different requirements, like, what can and can't be in their topical products that we do not have in America.

**DR. EMILY NEWSOM** [00:10:52] Yes. Well, that's a great question. So there are actually some newer sunscreens that are newer technology that cover a broader spectrum of light that are available in Europe and other countries like Australia that haven't been FDA approved. So the FDA is very vigorous. They are wanting the manufacturers to do more studies in order to approve these new sunscreens.

JVN [00:11:12] What are those ones in the EU and Australia?

**DR. EMILY NEWSOM** [00:11:14] Mexoryl. And there, they have some long chemical names, but there's a few new ones.

**JVN** [00:11:18] But they're chemical barriers, they're not physical.

**DR. EMILY NEWSOM** [00:11:20] They're newer, more modern chemicals.

JVN [00:11:23] Newer, more modern chemicals.

**DR. EMILY NEWSOM** [00:11:25] Chemical sunscreens, and those ones have not been approved in the US.

**JVN** [00:11:29] But what about the four that we tested that we have here? Are those four allowed in the EU and-?

**DR. EMILY NEWSOM** [00:11:34] Yeah. And then the, the other thing to answer your question is that, you know how we have SPF in this country?

JVN [00:11:39] Yes.

**DR. EMILY NEWSOM** [00:11:40] In Europe, they have a different system. That is, it's actually, like, slightly better because it's looking more at the broad, broader spectrum, because SPF only looks at UVB. And then the way we do the packaging now in the U.S. is it will say SPF and it will say "broad spectrum." But in, in Europe, their system is a little bit different and their, their numbers are looking a little bit. It's looking at a broader coverage, a broader wavelength of light. So UVA and UVB.

JVN [00:12:10] And why does ours only cover UVB?

**DR. EMILY NEWSOM** [00:12:13] Oh, good question. So originally we thought UVB was the only thing that was bad for the skin. We though UVA is fine. That's why tanning beds are UVA. And we use, they used to say, "Oh, UVA is fine." But now we know that UVA, while it doesn't cause sunburns as much. It, there's a lot more UVA that we're exposed to. Plus, it goes through window glass where UVB doesn't. So that's why we're getting, you know, so much from the car and windows. And so now we know that UVA is harmful too. So that's why you want to look for the words "broad spectrum," so, you know, you're getting some UVA coverage.

JVN [00:12:45] OK, wait. So we're going to take a really quick break. We're going to be right back with more Dr. Emily Newsom after the break. Welcome back to "Getting Curious." This is Jonathan Van Ness, we're talking all things skin, SPF, sun protection, skin cancer, all the things. So with the chemical things and the new ones, there's, like, some new ones on the block, but the FDA has not, like, approved those ones, but it does want to do further testing into the 12 that we currently use in America.

**DR. EMILY NEWSOM** [00:13:16] Yes.

**JVN** [00:13:17] But then it, as a doctor, which you are, do you think that the physical barriers are a safer way to go? And do those not get absorbed into the skin?

**DR. EMILY NEWSOM** [00:13:25] Right. Yeah, they just sit on top of the skin and they're derived from minerals. So I think, you know, if you are concerned, I definitely think they're the safest way to go. The only thing that people don't like about them is they don't rub in as well and they tend to be kind of whitish.

**JVN** [00:13:41] Ooh.

**DR. EMILY NEWSOM** [00:13:42] So that's why people like the chemical sunscreens, because they are a little more elegant. They rub in nicer. However, there's a lot of new technology with the mineral sunscreens. There's tinted formulations, there's powders, there's sprays and a lot of different things.

**JVN** [00:13:57] Do you notice any difference with those, like, 'cause I have definitely seen those like mineral powders, like where you kind of pump the brush and then apply it as like a translucent powder.

**DR. EMILY NEWSOM** [00:14:04] Yeah.

**JVN** [00:14:04] Do you like those?

DR. EMILY NEWSOM [00:14:05] Yeah, I love those. They're great.

**JVN** [00:14:07] And then what about, like, reapplication? Because like how, like, do mineral ones versus chemical applications, like, require more or less. And are they affected by, like, sweat and water differently?

**DR. EMILY NEWSOM** [00:14:17] They all need reapplication and they're all affected by sweat and water. So a few years ago, the FDA changed the labeling. So they're not allowed to use the word waterproof anymore. They have to say water resistant and for how many minutes. But really, none of it is waterproof. So if you're really, if you're going to be swimming, I recommend wearing a rash guard and, you know, using something else.

**JVN** [00:14:36] What's a rash guard?

**DR. EMILY NEWSOM** [00:14:37] Like a swimming shirt.

**JVN** [00:14:39] Oooh. Or just like what I like to do when I'm on vacation, is I always have an umbrella on the beach and then I, like, swim with my top off. But then I'm really, like, chillin under the umbrella.

**DR. EMILY NEWSOM** [00:14:50] Yeah. So seeking shade is good, but there's studies showing that just seeking shade alone isn't enough. So-.

JVN [00:14:50] Really? Why? 'Cause UVA and UVB can get through there?

**DR. EMILY NEWSOM** [00:14:58] They don't. Well, I, I don't know exactly why. There's just a study that showed that, you know, the seeking shade helps, but it wasn't quite enough as doing the sunscreen and seeking shade.

**JVN** [00:15:10] What about seeking shade and a towel over your shoulders underneath the thing?

**DR. EMILY NEWSOM** [00:15:15] I say do it all. If you see me at the beach, I have, I'm completely covered in sunscreen. I'm covered up. I have a big hat, big sunglasses, umbrella.

**JVN** [00:15:25] So you're, like, "I'm not really going to, like, as a dermatologist," like, you're not taking sun. Like you're not laying out in the sun.

**DR. EMILY NEWSOM** [00:15:30] No, because, I mean, I have to admit, I did it when I was a teenager and stuff like that. But now I just see so much skin cancer. And then going back to the microscope, you know, when I look at my patients, even when I remove their skin cancer, when they see their, quote, "normal skin," that sun damage skin is, it looks so different under the microscope. I can see how much the collagen has been damaged. And that's what leads to the wrinkling.

JVN [00:15:55] So what does it look like when it's been damaged?

**DR. EMILY NEWSOM** [00:15:58] So there's something called solar elastosis. Which is basically chopped up collagen and elastin. And you can see how much sun damage they have by how much, how far down the solar elastosis goes. So it goes down a few millimeters and then there's healthy collagen underneath that.

**JVN** [00:16:13] Does that look like, just, like, little cubes, like, healthy little cubes under the microscope or something?

**DR. EMILY NEWSOM** [00:16:18] Well, the healthy collagen is kind of pink and plump, little rope, kind of, like, fat ropes. And then the solar elastosis is kind of purplish gray and it's all broken up and not in, like, nice robes.

**JVN** [00:16:32] Interest. OK. So what about this? You fall asleep on the damn beach you wake up with that sunburn from hell. Vacation's fucking ruined. Is there a way to, like, fix the sun damage or like once it's there, is it always there? Like, we minimalize, like, the risk of, like, maybe that mole getting the sun exposure, then turning into cancer or anything like? Or so like cancer, like, risk, risk management and, like, actual burn risk management. Like, how can we get those little ropeys plumper and, like, the college and healthier, faster after a sunburn?

**DR. EMILY NEWSOM** [00:17:07] OK. Good question. So first I'll talk about what to do if you do get a sunburn. So when you have a sunburn, your skin is going to be really dry. So you're going to need a lot of moisture. You know, a lot of moisture. You want to replenish all the moisture. So lots, lots of moisturizer. You could take ibuprofen, you know, if you're OK with taking ibuprofen, something like that. So because it's antiinflammatory, so if-.

JVN [00:17:30] 'Cause your skin's literally inflamed from the-.

**DR. EMILY NEWSOM** [00:17:33] Yeah. From the, you know, like, it's a burn. It's an acute UV radiation burn.

**JVN** [00:17:39] It's an acute UV radiation burn. What about more water intake? Does that matter?

**DR. EMILY NEWSOM** [00:17:45] Yeah. You want to stay hydrated. Yes.

JVN [00:18:47] So, like, affecting like, does your level of, like, water intake. And, like, what we choose to eat and drink, like how much does that affect the appearance of our skin? Like, do you feel like your, like, alcoholic clients who, like, smell super boozy at, like, 10:30 in the morning, like, for no apparent reason, do you feel like their skin is a little bit more dry and busted than, like, the people who don't drink or-? Like what lifestyle things do you think lead to like some busted looking ropes of skin under the microphone, or microscope?

**DR. EMILY NEWSOM** [00:18:10] Definitely smoking.

JVN [00:18:12] Yes, smoking. What about weed? Not that I smoke that. Not that much.

DR. EMILY NEWSOM [00:18:16] Well, any kind of smoke isn't great.

**JVN** [00:18:19] Are you sure?

DR. EMILY NEWSOM [00:18:20] I mean, a little here and there is probably fine.

JVN [00:18:20] Yeah, I believe you, I believe you. You're a fucking doctor.

DR. EMILY NEWSOM [00:18:24] Just do, like, the gummies or whatever.

**JVN** [00:18:27] But that's THCV, which we learned on the podcast with this doctor who studies marijuana. And because, because the, it's true, the weed that we smoke it, it affects your bloodstream differently than THCV because that goes through your liver and the liver, I'm just kind of, like, a bit tired and I'm a little bit groggy. And I like that, that good old fashioned burning in my chest.

DR. EMILY NEWSOM [00:18:43] Well, it's just like everything.

**JVN** [00:18:44] If I smoked weed.

**DR. EMILY NEWSOM** [00:18:45] You know, everything in moderation, like, it's not like you can never have sugar again, but just try to, like, keep it in moderation.

JVN [00:18:53] OK, but wait. So the sunburn. I interrupted you, I didn't mean to.

**DR. EMILY NEWSOM** [00:18:55] No, no.

**JVN** [00:18:56] So you get the sunburn. We want to do lots of moisturizer. Now. What if you're someone who doesn't use moisturizer typically. But you should be like? What? Like in case of a sunburn, like do you stand by, like, one of those, like synthetic green aloe, like after sunburn things or do you think just like a Curel is great or like, just get it from an actual leaf of aloe. Like what do you suggest?

**DR. EMILY NEWSOM** [00:19:15] Yeah. I mean I just, as far as moisturizer, it's kind of a personal choice. Whatever feels good to you, whatever you gonna put on. I say go for it.

**JVN** [00:19:24] Is there any ingredients as a doctor that you see on the back of things you're like, "Uh, I'm good on that?" Like, are you like, do you steer clear of parabens or-?

**DR. EMILY NEWSOM** [00:19:31] Anything with a lot of fragrance. I just find that tends to irritate the skin. So I'm not big on fragrance.

JVN [00:19:38] What about a paraben?

**DR. EMILY NEWSOM** [00:19:40] Paraben is a preservative that's in so many of our products, like, to avoid parabens is really, really hard.

JVN [00:19:47] But they're not allowed in Europe. I feel like there's three. There's like the ethyl paraben. Ethyl-, there's like-. 'Cause, like, not to, like, shout out a particular skincare company in case, well actually no I wouldn't really sell for them because, so I will do, it's SK-II Water. Their first three ingredients are-. Google the first three ingredients of SK-II Water. Just so I make sure I'm not throwing them under the bus but I'm pretty sure because, honey, when I was, like, 25, I, like, saved up like 400 dollars I could buy, like, the Cate Blanchett, like, case of SK-II Waters.

**DR. EMILY NEWSOM** [00:20:17] Yeah.

**JVN** [00:20:18] And when I opened the box and saw the ingredients I was like, "I'm not opening it anymore, I gotta go."

**DR. EMILY NEWSOM** [00:20:21] The thing about skin care is a lot of it is just marketing, you know, a lot of those really expensive brands are just not good moisturizers.

JVN [00:20:28] Uh huh, yeah, it has methyl paraben.

**DR. EMILY NEWSOM** [00:20:33] Yeah. But parabens are in a lot of things, so it's kind of in that category of, you know, we don't really have good data to show that it's harmful. But there are things in Europe that they regulate that I think they should regulate more here. Like one of the big ones is nickel in cosmetics. So nickel is the most common contact allergen. So, but it's in all of our mascara and eye shadow, especially the shimmery ones, or like shimmery highlighters. So in nic-, in Europe, they regulate the amount of nickel in cosmetics, but they don't here. And because of trade secret laws, we don't even know what's in our products unless we ask the company. So that, that's always a problem, you know?

JVN [00:21:12] Yeah.

DR. EMILY NEWSOM [00:21:13] Especially for, like, eyelid eczema.

JVN [00:2:16] Oooh. Oooh. Because my-

DR. EMILY NEWSOM [00:21:20] I think, like, nickel is, like, one of the worst things.

**JVN** [00:21:21] Because my friend basically he looks like he has, like, some sort of like contact dermatitis. It almost looks like he is like psoriasis, like it looks like my psoriasis but in like in his hairline, like, after he used like this like one product, like is that like a contact dermatitis like eczema thing? Is that a thing?

**DR. EMILY NEWSOM** [00:21:38] Mmhmm. Yeah. There's definitely things that could be in hair products or hair color, like especially the jet black hair color. There's a prod-, there's a chemical called PPD.

JVN [00:21:49] Yeah.

**DR. EMILY NEWSOM** [00:21:50] Paraphenylenediamine. And that's what is the most common allergic reaction to-.

JVN [00:21:55] I have a friend who's crazy allergic to this.

**DR. EMILY NEWSOM** [00:21:57] To PPD. Yeah. And it's it's, it's in most hair color but it's, in the highest concentration in the jet black.

**JVN** [00:22:03] So what about, like, icing a sunburn. Does that help? Because it's anti-inflammatory or something?

DR. EMILY NEWSOM [00:22:09] Yeah, it's fine. If it feels good, it's fine.

**JVN** [00:22:11] So then what about, like, if you get a sunburn or like if you were someone who like spent a lot of time, like, in the sun as a kid, like, you were, like, a swimmer or whatever, is it just kind of, like, taking pictures of any moles or freckles on a consistent basis for screening is, like, the best way to stay ahead of it?

**DR. EMILY NEWSOM** [00:22:25] Yeah, that's a good question. So, you know, it's, if you've had a lot of sun damage or if you have a family history or any risk factors, then it's good to come see a dermatologist, get checked. But you can track your own moles. There's an app from OHSU at Oregon Health Science University and they have an app where you can actually track your own moles. Now, there are other apps that are not good that will diagnose, you know, this mole is good or bad. And those are shown to not be good. So-.

**JVN** [00:22:55] Don't trust that.

**DR. EMILY NEWSOM** [00:22:56] An app to track your moles is good, but an app that's going to claim to diagnose, I wouldn't trust that. At least for now. Maybe someday.

**JVN** [00:23:04] That's really good feedback. I love that. And I appreciate that. OK. We're going to take a really quick break and then we're going to be back with, like, a really cheerful subject. Welcome back to "Getting Curious." It's Jonathan Van Ness. We have Dr. Emily Newsom, she's a dermatologist at UCLA. And now I want to talk about skin cancer. Not that exciting of a topic. It's actually kind of dev. So what are the different types of skin cancer?

**DR. EMILY NEWSOM** [00:23:30] OK. Great question. So it kind of, the most common types kind of fall into two categories. There's melanoma and then the nonmelanoma skin cancers. So as far as non melanoma skin cancer, basal cell carcinoma is the most common

or BCC, and then squamous cell carcinoma is the second most common. And then melanoma is the third most common, but is the most aggressive in life thre-, you know, potentially life threatening. But even, you know, a lot of people will say, "Oh, it's skin cancer, it's not a big deal because the basal cell, well, it's, it's very common and it's usually not life threatening," but it can lead to disfiguring. You know, it's usually on the face in areas that are sun exposed so it can lead to disfiguring scars and it can lead to some pretty big problems. So it's not something you want to really take lightly.

JVN [00:24:18] How do, like, basal cell and squamous cell, like, start?

**DR. EMILY NEWSOM** [00:24:23] They, it's basically like what you were saying from the UV, the accumulation of UV over time, it damages the DNA.

JVN [00:24:30] But if, like, you're someone who has it, like you, does it start as like-?

DR. EMILY NEWSOM [00:24:34] Oh yeah.

JVN [00:24:34] A little red pimple? Does it start as like a-?

**DR. EMILY NEWSOM** [00:24:35] Yeah, exactly. Like a red pimple. A pimple that doesn't heal for months that keeps growing. Sometimes it bleeds or sometimes it kind of heals. But then it comes right back in the same spot. So anything, like, a spot of eczema or psoriasis or a pimple should heal at some point. If it just keeps coming back in the same spot, then you want to come get it checked. And usually the basal cell and squamous cell are more pink. They can be pigmented.

**JVN** [00:25:03] Do they look the same? Basal and squamous, kind of? Like, they can be pink or reddish?

**DR. EMILY NEWSOM** [00:25:08] Similar, yeah, squamous cell tend to be a little more scaly and basal cell are more pearly, but not always. So a lot of times, even when I do a biopsy, I don't know which one it is.

**JVN** [00:25:19] Will you ever, kind of, like, guess in your head like, "Oh, this, like, feels kind of squamous-y to me?" And then, but then sometimes you are surprised.

**DR. EMILY NEWSOM** [00:25:25] Yeah.

**JVN** [00:25:25] Does something ever seem squamous but then it's melanoma?

**DR. EMILY NEWSOM** [00:25:28] Yeah. So there's a really scary type of melanoma called amelanotic melanoma, which is melanoma that isn't pigmented. So it just looks like a pink patch, like a pink patch of eczema, or a pink mole. And that's like the, that's the one that keeps us up at night.

JVN [00:25:45] Because that one is more aggressive than normal?

**DR. EMILY NEWSOM** [00:25:46] It's hard to detect. It's just, it doesn't look like much.

JVN [00:25:49] Got it. And so most melanomas are actually brown.

DR. EMILY NEWSOM [00:25:53] Most are brown. Yeah.

**JVN** [00:25:54] And that's the one that like you need to look for, like ridges or like raised edges or like discoloration in the-?

**DR. EMILY NEWSOM** [00:25:59] Yeah. So we talk about the ABCDEs. So the most important is the E, which is evolving or change, but the A is for asymmetry. B is border so irregular, fuzzy borders.

JVN [00:26:11] We're talking about moles and freckles here. Right?

DR. EMILY NEWSOM [00:26:13] Yeah, we're talking about moles. C is-.

JVN [00:26:15] Do freckles count, too?

**DR. EMILY NEWSOM** [00:26:17] They can. There is a type of melanoma called lentigo maligna melanoma that derives from those kind of sun freckles, the bigger freckles.

JVN [00:26:26] Yeah.

**DR. EMILY NEWSOM** [00:26:27] Yeah.

JVN [00:26:27] I feel like I have those. When I get, in the sun.

**DR. EMILY NEWSOM** [00:26:31] The, yeah, like, the bigger ones that stay are lentigo. But the little tiny freckles that you get-.

**JVN** [00:26:37] And then they go away? 'Cause I feel like I don't have, like, the big ones that stay. Oh my God, we're gonna have to do, like, a full consultation after this. I hope you have time. I'll pay whatever. Do you take Venmo? Just kidding. No, you look at my face. I'm just kidding. No, you got to look at it. I'm just kidding. No, I'm not. Just kidding. Oh, so OK. So those kind of look the same, and then melanoma is the most dangerous?

**DR. EMILY NEWSOM** [00:26:58] Yeah. Melanoma is, you know, it, if it's caught early, it's, it's easily treated, has a good prognosis. But when it's caught later, when it can spread to the lymph nodes and to other organs, to the liver, to the brain, and it can be life threatening.

**JVN** [00:27:13] And is that-? Is early detection again for that kind of just like very paramount?

**DR. EMILY NEWSOM** [00:27:19] Yeah. So you, you know, like, I was saying the ABCDEs, like, I was saying C is color, which is multiple colors or very dark color. D is diameter. So if it's larger than about a pencil eraser size, which is about five millimeters, so especially larger moles, or we also talk about the ugly duckling sign, which is the mole that just kind of stands out, doesn't look like the others.

JVN [00:27:40] Oooh.

**DR. EMILY NEWSOM** [00:27:41] That's the one that kind of catches your eye. That's the one that we might check. But really, change is the biggest thing. So, you know, your moles can change a little bit, like in pregnancy or even up to, like, about, even in your 20s, up to about 30. But any mole that's changing, growing. That's kind of the biggest concern.

**JVN** [00:28:02] And then what do, like, general care doctors? Should you go straight to dermatologists, get a referral? Like what do you do if you're worried about it?

**DR. EMILY NEWSOM** [00:28:12] Yeah, usually you can talk to your primary care doctor first, and they could look at it and then they'll refer you. Depending.

JVN [00:28:19] So, like, in dermatology, do you like, 'cause, like, you're in a clinic at UCLA?

**DR. EMILY NEWSOM** [00:28:26] Yes.

JVN [00:28:27] So, like, what is like a day in the life of you?

**DR. EMILY NEWSOM** [00:28:30] Oh, good question. So I do a little bit of everything. So, like, one day a week is, I do Mohs surgery, which is skin cancer removal. So I just remove skin cancer all day. And then one day a week, I do cosmetic dermatology where I'm doing, you know, like, lasers and fillers and Botox, and all that stuff. And then the other days, I do general dermatology. So I'm seeing rashes like psoriasis and seeing teenagers with acne. But then I'm also doing a lot of skin checks and looking for skin cancer or seeing my patients that, you know, once you get a skin cancer, you tend to get more.

**JVN** [00:29:03] Oh, is that a thing?

**DR. EMILY NEWSOM** [00:29:04] So I have a lot of patients that, you know, are coming back regularly to look for more skin cancers.

JVN [00:29:10] What do you think are the most, like, misdiagnosed skin things?

**DR. EMILY NEWSOM** [00:29:14] Oh, OK.

**JVN** [00:29:15] 'Cause, like, my psoriasis, it took me like five doctors to figure out, like, what it was. Like first it was like, because I've been vegan for, like, four years. So like the first, when I first, like, had a flare up, the first doctor was like, "Oh, it's, you're eating meat now. So your skin's having, like, an allergic reaction to, like, meat and dairy. So just take

Benadryl." So I took Benadryl for, like, three weeks and I just kept, like, having this really, like, itchy, flaky, like, awful psoriatic outbreak. Then I was like, well, it all started from a cut because, like, I got like this like scrape on my side and the scrape turned into psoriasis. So then the second dermatologist is like, "Oh, that cut was actually a bacterial infection. Now, like, your skin's like a big petri dish for, like, this, you must've gotten a bacterial infection." So then he put me on doxycycline and I had, like, such a, like, sour upset stomach for, like, a month, but it just kept spreading and getting worse. Then the third guy was like, "Honestly, I have no idea what this is. Never seen anything like it, good luck." And then the fourth guy was like, "Well, that's just a classic case of guttate psoriasis. Here is, like, some steroid oil." And, like, in three applications, it was gone.

**DR. EMILY NEWSOM** [00:30:15] Yeah, I mean, it's, skin disease is hard. And the thing is, in med school, you don't get a lot of training. So in dermatology, we get, you know, intense training in the skin. But it's very specialized. And a lot of times, like, urgent care, they don't, they don't have very much experience in treating skin.

JVN [00:30:33] So you went to, like, med school.

**DR. EMILY NEWSOM** [00:31:35] Yes.

JVN [00:31:35] And that's four years.

DR. EMILY NEWSOM [00:30:37] Four years.

JVN [00:30:38] And that's just, like, hella biology, cadaver, like, chemistry.

**DR. EMILY NEWSOM** [00:30:42] Yeah. The first two years, yeah. And then the second two years are hospital rotations where you kind of try out every specialty, like, OBGYN and internal medicine, pediatrics.

**JVN** [00:30:52] But is dermatology one of the residencies or one of the stations or whatever?

**DR. EMILY NEWSOM** [00:30:55] That's, like, an elective. So not everyone in med school does it.

**JVN** [00:30:59] Did you do it then?

DR. EMILY NEWSOM [00:31:00] Yeah, yeah.

**JVN** [00:31:01] Yeah. So that is that where you kind of figured out, like, that's what you wanted to do?

DR. EMILY NEWSOM [00:31:04] Mmhmm. Yeah.

**JVN** [00:31:06] That's very cool. So, like, in, but for a lot of doctors that are general practitioners or, like, OBGYNs, are just like a typical doctor, like, would, how many hours would you say, in like the four years of your first time, if you had not taken that skin elective, the dermatology elective, would you have spent on-?

**DR. EMILY NEWSOM** [00:31:24] Yeah, they don't get a lot. We, I'm involved in the course at UCLA and it's only, like, a two week course.

JVN [00:31:29] And our skin is our biggest organ, isn't it?

DR. EMILY NEWSOM [00:31:32] It just got downgraded to the second biggest.

JVN [00:31:35] From who? Who took our crown?

**DR. EMILY NEWSOM** [00:31:36] There's a new organ.

JVN [00:31:38] Oh, yeah. What is it?

**DR. EMILY NEWSOM** [00:31:40] The interstitium.

**JVN** [00:31:41] Which is the?

**DR. EMILY NEWSOM** [00:31:42] That's kind of, like, all the connective tissue in between the organs.

JVN [00:31:46] Right.

**DR. EMILY NEWSOM** [00:31:47] The interstitium.

JVN [00:31:48] That interstitium, she came for our crown.

**DR. EMILY NEWSOM** [00:31:50] We got knocked down.

JVN [00:31:51] Is she kind of, does she look like a fascia?

DR. EMILY NEWSOM [00:31:52] She's like Pluto.

JVN [00:31:54] She is the Pluto of organs. But is she, like, is she, like, the white fascia stuff?

**DR. EMILY NEWSOM** [00:31:58] The fascia and just everything in between.

JVN [00:32:00] Ew, interstitium.

**DR. EMILY NEWSOM** [00:32:02] Yeah.

**JVN** [00:32:03] Who does that?

**DR. EMILY NEWSOM** [00:32:04] They trumped us. They took us.

JVN [00:32:06] But so it's the second biggest organ but-.

DR. EMILY NEWSOM [00:32:08] Second. It's still a very big organ.

**JVN** [00:32:10] But presumably, you know, I mean, it has a lot of interaction with how it lets things into, because if something gets into your bloodstream. Doesn't that mean that it would get to, like, say your, like, kidney or your liver or something if it's in your bloodstream?

**DR. EMILY NEWSOM** [00:32:21] Yeah, I mean, our skin, it's such an interesting organ because it's our protection from the outer world. So it's an immune system. It's our protection. It's what a lot of our sensation and the way we communicate is through touch and through our skin, the way we interpret the world. So there's so many properties to skin.

JVN [00:32:41] And then this is, like, I got to interview Erin Brockovich. And it was, like, it really blew my mind. But I was think, we were talking about, like, the EPA and then, like, the FDA. Because, like, you have the Food and Drug Administration, which, you know, is, like, for, you know, FDA and then the EPA, which is, like, environmental, but, like, there's kind of an inter-, a crossover there because, you know, the EPA, if they decide to let, like, you know, ozone, ozone depleting, like, chemicals into the air or, you know, that would affect like our ability to protect our skin from damaging like sunrays if, like, we deplete the ozone layer. Also, like, with sunscreens, you know, we're seeing like in, like, Hawaii, they just banned, I think they just banned, like, do you know about this?

**DR. EMILY NEWSOM** [00:33:22] Yeah.

JVN [00:33:23] What was that whole thing?

DR. EMILY NEWSOM [00:33:24] They banned oxybenzone and another one. They banned two chemical sunscreens, which in my opinion is unfortunate. And I've looked at the studies. It was a small study and it was done in a lab, it wasn't shown actually, like, in the ocean. And there's a lot of reasons for the coral dying. I mean, there's, there's rising ocean temperatures. There's, I mean, not only the coral are dying, a lot of the ocean is dying. So I think there's other factors and we should look into the role of sunscreen. But again, my fear with that is I think that the legislatures in Hawaii acted a little bit too quickly to actually ban it, because our concern in my field and the American Academy of Dermatology has, has had statements on this and on the absorption study. But basically, our concern is that we don't want to limit access because we know how damaging the UV is to our skin. And we, we're seeing an epidemic of melanoma and skin cancer. So we don't want to, we don't want to be too quick to limit our access to these, you know, factors.

JVN [00:34:28] It just reminds me of, like, coming, you know, in the last year, like, learning to manage, like, you know, my podcast and my stand up comedy and then how that works with, like, my book stuff. And then, like, managing, like, the intersection of a lot of my pieces of business is, like, what's really hard to coordinate. But it seems like when it comes to like skin and water, like those pieces of our health and our wellness, there is an intersection with like our environment. It's like, I just, I just wish we had, like, a manager, you know? It's like the agents are so good at getting you the job. But then, like, coordinating all of it is like it's just difficult because it does seem like the people in Hawaii and the legislatures there, like, have seen, there's a very clear, like, issue with their coral and like the depletion of, and obviously there is like a lot of things that I'm sure that people are just like wanting to protect, like there-.

**DR. EMILY NEWSOM** [00:35:18] Yeah. And we should, we should want to protect our environment. That is important. But, you know, for instance, I met a girl from Hawaii the other day and she's saying, you know, "I'm a horseback rider and I don't even go in the ocean and I can't get my sunscreen." That's, like, the sunscreen.

**JVN** [00:35:31] Couldn't she, like, Amazon it, though? And then just, like, keep it in a clutch box and not let anybody find it?

**DR. EMILY NEWSOM** [00:35:33] Yeah. She had to, like, stock up while she's on the mainland. So, you know, a lot of people in Hawaii aren't necessarily going in the ocean.

JVN [00:35:41] Right.

**DR. EMILY NEWSOM** [00:35:42] And then they, they are limited by access.

JVN [00:35:44] Oh, yeah, that's true. Much interest.

**DR. EMILY NEWSOM** [00:35:46] So even if it does damage the coral, what if you want to use it, you know, just for horseback riding or golfing or sitting at the pool?

JVN [00:35:54] Yeah, it's just interesting. I just feel like it's like a, it's like, there's just, like, I feel like there's like a little bit of a blind spot and then back, not to you, just in general. And then back to the dermatology thing, the whole thing about dermatology, because it's like, it's, 'cause really, like, you have, like, half, well, because, like, some of it's like for, you know, working with, like, confidence and, like, dealing with refinements in, like, people's literal look and then other bits of it are, like, more, like, cancer screening and, and all of that, which is like, it's, you just have to wear a lot of hats.

DR. EMILY NEWSOM [00:36:28] That's what I love about it. I love kind of the mixture. You know, I love, cosmetic dermatology is different, it's more about wellness and improving skin health and making you feel good, you know, kind of like your field. And it's really fun because you're not just focusing on disease. So that's what I like about it. But then I really find it rewarding to treat skin cancer too. So I like kind of mixing it up, but that's just how I am. I like that kind of fast pace. And doing different things.

**JVN** [00:37:56] I was just thinking, like, for the homeless community in Los Angeles, like, being exposed to, like, a lot of sun, like, like not able to, like, maybe afford. And then that just made me think about, like, people that don't have access to health care or, like, maybe are uninsured if you're worried or if that is you, like where is a place you could go if you were, like, fearful that you had-?

**DR. EMILY NEWSOM** [00:37:18] Oh, well, we have a Venice family clinic where our UCLA faculty volunteer at, so, you know, there are options. There's county hospitals like All of You and UCLA Harbor. So there are resources.

**JVN** [00:37:33] If you like, so if you're uninsured and you're worried about something in your skin, get it checked out. Like, where there's a will, there's a way. Is what I hear you saying.

**DR. EMILY NEWSOM** [00:37:40] Yeah. And, you know, it's, it's worth it, it's your health. So you should take it seriously.

**JVN** [00:37:46] So we've come to the part of the podcast where it's been like 40 minutes. So it's like, do you ever go to yoga?

DR. EMILY NEWSOM [00:37:52] Yes. I love yoga.

**JVN** [00:37:53] OK, so this is basically like Yogi recess, but in the podcast. Like, if there's anything about skin that like we really should've talk about, but I just could not stop talking about, like, God knows what, we can totally hit that now or any projects that you're excited about or any like new skin care legislation that's coming around the corner that you're keeping your eyes on. Or do you have any endorsements for 2020, whatever. Like, anything you want to say, you got the floor.

DR. EMILY NEWSOM [00:38:13] Gosh, there's so many things I was trying to think about, some of the other questions you asked me that I didn't get to, like, about common mimickers of skin cancer or misdiagnosed. So there's something that I see all the time called seborrheic keratosis, which are just kind of brown growths, or sometimes they're tan or skin colored, on the skin, we start to get them in their 30s and 40s. And I get seen for them all the time. And they're not dangerous. They don't go by the same ABCDE rules for melanoma. So that's one that I was thinking about. And then as far as, what else? Just, you know, skin cancer is, it's a real thing. It can be deadly. And even if it's not deadly, it can be disfiguring. And even if you think "When I'm 70, I won't care what I look like," like, you do. 70 year olds care.

JVN [00:38:59] Yeah.

DR. EMILY NEWSOM [00:39:00] They don't want to have a big hole in their face.

JVN [00:39:01] No.

**DR. EMILY NEWSOM** [00:39:02] And you won't want to, like, you think you won't care later, but you really will. And so you can just put in the effort now, especially for younger people, are really anyone with a life expectancy longer than, you know, a decade or two. You should really focus on protecting your skin because it's so important and our culture has a disconnect where we, we see tans as healthy, it's not healthy. A tan is your skin, like, desperately trying to protect itself from DNA-mutating UV rays.

**JVN** [00:39:29] So then like on that note, as we leave, protections. Do things like window tinting, like for the UVA ones, does that work?

**DR. EMILY NEWSOM** [00:39:36] Yeah. There's actually clear UVA filters that you can get installed. So that way it's compliant with the law.

JVN [00:39:42] And do you believe, like, those work?

**DR. EMILY NEWSOM** [00:39:43] Yeah. Yeah. I see so many more skin cancers on the left side of the face and the left arm, from just driving.

**JVN** [00:39:49] Interest.

**DR. EMILY NEWSOM** [00:39:50] So yeah. Wear, you can have sun sleeves in your car or put sunscreen on. Don't forget your forearms and you know, especially the left side. Left ear. Left face.

**JVN** [00:40:00] Interesting. So sunscreen's in the car. Physical barriers. Seek shelter. Do both. Do, like, use all of our tools.

DR. EMILY NEWSOM [00:40:08] Yeah. Use all of our tools.

JVN [00:40:09] Dr. Emily Newsom, thank you so much for your time. I really appreciate it.

**DR. EMILY NEWSOM** [00:40:12] Thank you so much. This has been awesome. I really appreciate the opportunity.

**JVN** [00:40:15] My pleasure. Thanks for coming in. You've been listening to Getting Curious with me, Jonathan Van Ness. My guest this week was dermatologist Dr. Emily Newsom.

You'll find links to her work in the episode description of whatever you're listening to the show on.

Our theme music is "Freak" by Quiñ - thanks to her for letting us use it. If you enjoyed our show, introduce a friend - show them how to subscribe.

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