

Sawbones 230: Freckles

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[theme music plays]

Justin: Hello everybody, and welcome to Sawbones, a marital tour of misguided medicine. I'm your co-host, Justin McElroy.

Sydnee: And I'm Sydnee McElroy.

Justin: Well, Syd, the sun is back.

Sydnee: Yeah. Did it—you mean like, each day?

Justin: Making its presence known.

Sydnee: It comes back... like, in the morning?

Justin: No. Yes. Except now, it's back with a vengeance. The sun is here to exert its will over us, the common folk.

Sydnee: We kind of skipped spring, I feel like. I mean, it is still technically spring, but...

Justin: Yeah, like, May?

Sydnee: Like, spring didn't happen.

Justin: May... like, late May here in West Virginia, 90 degrees today. `Bout done sizzled myself on the way into the Huntington Mall, just trying to take my family to The Gap, and...

Sydnee: Y'know, though, it's not the heat that'll getcha. It's the humidity.

Justin: Yeah, and also the heat.

Sydnee: [laughs]

Justin: It's a lot.

Sydnee: Yeah, but people like to say that about humidity a lot. That's a thing people say.

Justin: Yeah. But my thing I normally come back to them with is like, yeah, but it's also very hot, currently.

Sydnee: That's true.

Justin: Is the thing that I say back to them.

Sydnee: You gotta be careful out in the sun.

Justin: So, we've talked about that before at length, and this is the time of year that I like to remind people, and we wanted to weigh into that, to give our skincare spiel. So uh, Syd hit upon the idea of freckles, which is weird we haven't talked about before.

Sydnee: Well, it is, but it's also one of those topics that isn't really... it's not medicine, per se? Except that it was.

Justin: It was, but now it isn't? Is this what you're telling me?

Sydnee: Well, it's one of those things that... we hit on these topics sometimes on Sawbones that, you wouldn't think of freckles as like, a thing

you would talk to your doctor about. Except, for a lot of history, people did. So...

Justin: Okay, well, listen, now I'm on the edge of my—

Sydnee: So it's fair game.

Justin: I'm on the edge of my seat, as you can see. My wrinkle—not my wrinkles. My wrinkles are there, too. My freckles are very prominently displayed. It's that time of year.

Sydnee: Hey, y'know what Jimmy Buffet says about wrinkles?

Justin: Tell me.

Sydnee: Wrinkles only go where the smiles have been.

Justin: Thank you. Yes. Thank you, Sydnee. I needed that.

Sydnee: I wonder if he's quoting somebody.

Justin: Probably. I could Google it if you want, or we could just do the...

Sydnee: I don't know. That's in a song, though.

Justin: Okay.

Sydnee: Anyway, thank you to Annie and Susanna and Aaron and Kalani and Michael and Abigail and Max for recommending this topic of freckles.

Justin: Freckles!

Sydnee: Freckles.

Justin: So, what... are... freckles? 'Cause you asked me that. Sometimes, Sydnee plays a game where it's... it's... the game is—and she always does it

while she's researching. And the game is, "What's the common man know?" And she likes to tap her old buddy J-Man for that experiment. It's usually like, "Hey, do you know what freckles are?" And then I stumble through it, very incompetently, and then Sydnee goes, "Okay. Got it. Thanks."

Sydnee: [laughs] I just want to make sure before I go too in depth into explaining something that it's not common knowledge. Sometimes I lose track of what everybody knows, and what I learned in med school.

Justin: Yeah.

Sydnee: Freckles are the result... well, you said melanin.

Justin: I did say melanin? Or I might've said melatonin. Hoops does get those confused from time to time.

Sydnee: Okay. Melatonin is a hormone in your brain that tells you it's sleepy time.

Justin: Are you gonna tell me they don't sound a lot alike?

Sydnee: Melanin is pigment in your skin.

Justin: Okay, but like, you're not giving me mnemonic devices, Sydnee. I—I understand that when you say it.

Sydnee: No, well, I'm just telling you. I'm supposed to give information. There's information.

Justin: Okay. Thank you for the data.

Sydnee: So, you can have increased concentrations of melanin in certain areas of your skin, because of the cells that are in those areas. Specifically, melanocytes, which... produce melanin. Makes sense, right?

Justin: Mm-hmm.

Sydnee: And in a lot of people, those can be kind of spread evenly all over the body. Which means... everything kind of gets lighter or darker, depending on the time of year, at the same rate.

Justin: Mm-hmm.

Sydnee: But in people with freckles, you will see clu—there are clusters of these melanocytes in different places. And so, melanin is produced in higher concentrations in those little clusters, and... hence, you get freckles.

Justin: Okay, but why?

Sydnee: It's just genetic differences. There's a gene, actually, linked to this. The MC1R gene, and it contributes to the creation of a slightly different kind of pigment, and then, this clustering of cells, as well as, it's also linked to red hair, which is why you so commonly see people with red hair have freckles.

Justin: Right.

Sydnee: But, not all people with red hair have freckles, because not all people with red hair have this specific gene mutation.

Justin: Okay.

Sydnee: That's important to know. That's a common misconception.

Justin: That the two are always hand in hand?

Sydnee: Yeah. And they're not. So, melanin is produced when you're exposed to sun.

Justin: Okay.

Sydnee: So that's an interesting point, because you wouldn't necessarily notice your freckles unless you were exposed to sun. I mean, some people do.

Justin: Yes.

Sydnee: But the more sun you get, the more your freckles show. And then, when you are not getting as much sun, they fade.

Justin: Okay.

Sydnee: Would you say that's fair as a freckled individual?

Justin: Yes. As someone who lives with freckles every day, I can say that that is accurate.

Sydnee: And melanin is actually kind of like... sunglasses for your skin.

Justin: Go on.

Sydnee: It helps to kind of protect your skin from the sun's rays. That's what its purpose is. The pigment, melanin.

Justin: Okay. But do I—am I better protected, then?

Sydnee: No.

Justin: 'Cause I thought that people with freckles are like, at a higher risk of skin cancer.

Sydnee: You are. I was gonna say that at the end, but you are.

Justin: Oh. Okay, well, I'm sorry I ruined it.

Sydnee: No, that's okay. I mean, it's a good point to know.

Justin: But that's good. It's good to get that helpful information out now. If they stop listening to the podcast, like, midway through, they forget, they go get a sandwich or something, they've got that life-saving information.

Sydnee: No, I mean, if you think about it, if you have melanin more evenly distributed, and more of it all over your body, that would be more protective than just little clusters.

Justin: Oh, I guess you're right. It would be like—

Sydnee: It's kind of like—

Justin: If you had sunglasses with a bunch of holes in them.

Sydnee: There you go.

Justin: Okay.

Sydnee: Or like, if you put on your sunscreen in little dollops all over your body and didn't spread it out.

Justin: Yeah.

Sydnee: Yeah. Um, have you ever heard them referred to as angel's kisses?

Justin: No. A lot of angel related stuff. People like to dig up on babies a lot. Like, angel bites? Like, when you—

Sydnee: Yeah. Or stork bites.

Justin: Or stork bite. Well, no, stork bite is on your neck. Angel bite is in your ear.

Sydnee: It's an angel kiss, I thought.

Justin: What?

Sydnee: There's no angel bite.

Justin: Angel bite is when you have a little divot in your ear. You were so sweet that angels took a little nibble out of you.

Sydnee: I thought my mom just called it that.

Justin: Okay, it might just be your mom. That does sound like a very your mom thing.

Sydnee: 'Cause that's weird, if we insinuate that sometimes, angels bite you.

Justin: Yes, 'cause they—no, it's 'cause when you're coming through the conveyor belt, you just look so sweet, they just had to take a nibble.

Sydnee: [laughs] Well, anyway, I'd never heard of freckles called angels' kisses.

Justin: Tweet at Sydnee if you've heard angel bites before. Or if it's just her mom.

Sydnee: Okay. We—you can tell me about that. But I had never heard of angels' kisses. But as I researched freckles, I will tell you that this is a widespread term, at least on the internet, among people who write articles about freckles.

Justin: Okay.

Sydnee: Uh, there's also, apparently, an Irish proverb that says, a face without freckles is like a night without stars.

Justin: That's beautiful. I love that.

Sydnee: I thought that was lovely. Yeah. And freckles are just a difference in skin appearance. That's it. I mean, I described why they happen. But, throughout history, there have been a lot of diverse opinions about why they happen, and whether or not we should do something about them.

Justin: Someone has to stop these freckles.

Sydnee: So, if we go all the way back to ancient Rome, clear complexions, like, smooth, even colored throughout complexions, were prized. So, it wasn't that freckles were bad, it's just that you didn't want... you didn't want any variation in your skin tone. You wanted to be one, even skin tone.

Justin: Right, a nice even, smooth... yeah.

Sydnee: That was the beauty ideal. Uh, so, Romans would use like, lead-based chemical peels, with things like vinegar or mercury in them.

Justin: Good job, y'all.

Sydnee: To try to even their skin tone. Obviously, this is dangerous.

Justin: Yes. Don't do this thing.

Sydnee: And bad. We're gonna do this a lot, though, in this episode.

Justin: Oh, okay.

Sydnee: People—people do this a lot. Um, there—now, if that sounds a little too basic for you, maybe you want to try something a little more exotic. Maybe you want to use some crocodile intestines. Or crocodile dung, if you don't want to mess with the intestines. Or uh, farian fish. And um, those were supposedly helpful in removing freckles.

Justin: Crocodile Dung...dee-lightful! See, I was trying to get...

Sydnee: [laughs] I don't know where you were going with that. I don't know what that was.

Justin: I was trying to get to Crocodile Dundee, but it just wasn't there.

Sydnee: Ohh.

Justin: I just—it wasn't there, Syd. It's been a long day. It just wasn't there, eh?

Sydnee: Uh, y'know who also didn't bring it home with this one is Pliny the Elder.

Justin: [laughs]

Sydnee: In addition to Justin, Pliny the Elder had a lot of—

Justin: Here are some other historical figures that didn't bring home the bacon. [laughing]

Sydnee: Pliny the Elder had a lot of recommendations for freckles, but none of them are particularly funny. They're just... like, there's a root called white bryony, and there's an oil of balanus. Fig mixed with fenugreek. Uh, four laurel berries mixed in oil. Specifically, four. I thought that was odd. Just get four of them. Powdered myrtle leaves.

The only thing I found interesting about that is that, I guess powdered myrtle leaves are also good for hangnails. And I am baffled that there was a point in history where there was any treatment for hangnails other than... like, cut it off?

Justin: Right.

Sydnee: Why were you putting powdered myrtle—what were you hoping for?

Justin: Umm...

Sydnee: So anyway, Pliny the Elder had a lot of... of...

Justin: I like that Pliny the Elder has a sort of status that, even when he doesn't have the good stuff to bring, um, he still gets on the show. Like, he's sort of like, um... like Martin Short. Y'know what I mean? He didn't have something to promote, but he's just great to have on the show. Welcome.

Sydnee: [laughs] He's just happy to be here.

Justin: He's just happy—like, he always delivers, and like, we're just happy to have him around. It's okay that he doesn't have any heat to bring.

Sydnee: It just—it never fails. If I'm trying to find some more stuff for an episode, and I Google 'Pliny the Elder' and whatever the topic is, something comes up.

Justin: Yeah.

Sydnee: There's always something. Um, during the Middle Ages, we did all kinds of crazy things in general. But specifically, for freckles, um, we didn't want to use the same lead-based cosmetics that we had used in the past.

Justin: Mm-hmm.

Sydnee: Which is good.

Justin: We wised up. We got there.

Sydnee: We turned to more natural methods. Y'know, other ways of trying to...

Justin: Alright, Middle Ages! I'm sorry I dunked on you for so long!

Sydnee: So you could try, maybe boil some oatmeal and vinegar together.

Justin: Ugh.

Sydnee: And smear that on your face.

Justin: Well, it's better than eat it.

Sydnee: Or you could use, uh, bull's blood or hare's blood.

Justin: It's either from a giganto bull, or a tiny hare, but we don't know. Just get some of the blood. I think if I had to choose... sorry, Peter Cottontail. I'd probably go ahead and slice him up, rather than a bull.

Sydnee: Right. Well, I mean, if you're talking about, what are you more likely to survive... I would say the bunny.

Justin: Yeah. And it's like, if we don't know, can we just all decide bunny?

Sydnee: Well, that's fair. Yeah, why did we even throw bull in there?

Justin: Why do you even throw bull in there? It's like, you'd be so jized to find a substitute for fighting a—

Sydnee: For bull. You'd think that would eliminate the need. Like, why would you include that in a pharmacopeia?

Justin: Ginger matador. Like, stabbing. Like, what are you doing? This is illegal now. Like, "No. It's for my freckles."

Sydnee: [laughs] Um, it also helps if you cover the hare's blood – or bull's blood, if you were so inclined – with a sheep leather Band-Aid.

Justin: A what?

Sydnee: A Band-Aid made out of sheep leather?

Justin: Sheep leather. Okay.

Sydnee: Mm-hmm. Sure. Um, or – this was my favorite – you could get an amethyst and lick it, and then rub it on your face.

Justin: Yeah! Yeah!

Sydnee: Not... not for freckles. Just for fun. No, it was supposed to be a cure for freckles. [laughs]

Justin: Supposed to be a cure for freckles. Just like, rub an amethyst on it.

Sydnee: Well, you lick it first. And then you rub it.

Justin: Ohh! Okay!

Sydnee: You lick it, and then you rub it on your face.

Justin: I feel bad for being so judgmental! I didn't know you licked it first!

Sydnee: I have an amethyst around my neck right now. Do you want to try?

Justin: Yeah. We never put these to good use!

Sydnee: [laughing] You wanna rub my...

Justin: I'm gonna—I'm extending my right arm.

Sydnee: Rub Cooper's birthstone on your face.

Justin: I'm extending my right arm.

Sydnee: Uh-huh.

Justin: And Sydnee's gonna lick her necklace. You're not doing it! This isn't for the podcast! Lick your necklace!

Sydnee: Okay, I licked my necklace.

Justin: You're—you're pretending! Stop! This is for science!

Sydnee: [pause] Okay.

Justin: Okay, you licked your necklace. Now I'm gonna reach over.

Sydnee: Okay. There.

Justin: [grunts]

Sydnee: Now your hand's wet.

Justin: Now, how long is this supposed to...

Sydnee: I don't know! They didn't give specifics!

Justin: Hey, listen. They're gone. It's working. Sydnee, we're gonna need a bigger necklace. And a bigger tongue.

Sydnee: Please don't—[laughs]

Justin: And more wives.

Sydnee: Don't spread this misinformation.

Justin: Hey, I'm just saying, it's working amazing. They're disappearing before my eyes.

Sydnee: There's a recipe—

Justin: Oh no, my skin is becoming translucent! It's working too well! We've—why haven't we been trying these, all this time, Sydnee? We've been lambasting the past without actually putting this to the test! This is amaziing!

Sydnee: Who knew you were just one giant freckle?

Justin: I was just a freckle—oh no, now I'm disappeariing! Sydneeee!
Curse youuu, Middle Ageees!

Sydnee: [laughing] We can't record this late at night anymore.

Justin: I'm lo—ba da ba ba ba, I'm lovin' it. Whatever.

Sydnee: There is a—there's a recipe book, um, made by a Sir Hugh Plat, who put together a lot of different...

Justin: [laughing]

Sydnee: ... concoctions.

Justin: [in a goofy accent] My name is Sir Hugh Plat! I will take care of these freckles!

Sydnee: For your skin. Ways to take care of your skin. He called his book, 'Delights for Ladies.' [laughing]

Justin: [in a goofy accent] My book, of course, is Delights for Ladies!
[laughing] I'm the worst!

Sydnee: Thank you so much, Sir Plat. I needed a delight. Uh, one recommendation is that you take some... some tansy weed and strawberries and milk.

Justin: [laughing] That's actually what it says on my business card, so I'm so mad that he stole that.

Sydnee: Uh, of course, there were things like, um, you could wash your face with boiled elder leaves at midnight during a full moon.

Justin: Ooh, so romantic.

Sydnee: And then, he returned to the oatmeal and vinegar face mask, if all else failed.

Justin: Do you think that they... I was thinking about this, uh, a few episodes ago. Do you think that old-timey people made some of these more complicated, so that they have stuff to fall back on when it doesn't work? Like, "Was it *exactly* midnight? Was it 12:01? Was it 11:59?"

Sydnee: Oh, I think for sure.

Justin: For sure, right?

Sydnee: It's sort of like the way you just didn't—you didn't have enough faith in it, kind of. Y'know... you didn't believe, that's why your wish didn't come true.

Justin: Believe hard enough.

Sydnee: You didn't believe hard enough. Uh, a common superstition during the Middle Ages... so, a lot of these, I'm kind of referencing these methods to remove freckles, because it was the fashion. It was for, y'know, beauty reasons. Cosmetic reasons, for a lot of people.

But there was also a superstition that people who had freckles, especially women, more so, but all people who had freckles were in, somehow, communication with the devil.

Justin: Mmm.

Sydnee: And that these marks were—

Justin: Just women?

Sydnee: —marks of their allegiance to the devil.

Justin: Just women with freckles? Is that what you said?

Sydnee: Well, it was associated with accusations of witchcraft, so yes.

Justin: Ah, so sure. Yeah.

Sydnee: So yeah, there was this belief that freckles were a sign that you were consorting with dark magics. And that, um, you would die an early death.

Justin: Okay.

Sydnee: I guess 'cause of your...

Justin: Witchdom.

Sydnee: Hanging out with the devil thing?

Justin: I guess.

Sydnee: Yeah. Uh, in the renaissance – and we've talked about this before on like, our beauty episode.

Justin: The devil is a known carcinogen. Everybody knows that.

Sydnee: [laughs] I mean, that's probably true.

Justin: The devil. Burnt toast. Bacon.

Sydnee: Um... yeah, really any processed meats.

Justin: Thanks.

Sydnee: You're welcome. It, uh—so in the renaissance, women used – and we've talked about this before – the Venetian ceruse, to cover your freckles. It had lead and mercury in it.

Justin: Oh, right.

Sydnee: It was like a thick, white stuff to make your face look really pale. And there was a thought that maybe people even died from this, from using this, from inhaling, like, lead fumes from the foundation.

In the Colonial period, Dolley Madison was kind of the... the fashion icon.

Justin: Freckle expert?

Sydnee: No. But everybody wanted to look like her. So everybody wanted to have pale skin and pink cheeks. And so, you could use things like, uh, one thing that people would use was called the rose complexion mask, which is made from mixing together crushed rose petals, honey, oil of tartar, vinegar, and rye meal.

Justin: Hmm.

Sydnee: And then you leave it on overnight to harden, and wash it off with lemon juice.

Justin: That sounds kind of nice, actually.

Sydnee: And then you can look like Dolley Madison.

Justin: Didn't look—I'd rather look like Dolly Parton, if I have a choice.

Sydnee: Is that a... really?

Justin: I mean, between the two?

Sydnee: You want to look like Dolly Parton?

Justin: She's kind of an icon of mine. Sure.

Sydnee: Okay.

Justin: I mean, just between the two.

Sydnee: I mean, you can. Like, I'm not stopping you. I just didn't know you—

Justin: Just between the two.

Sydnee: Okay. Do you even know what Dolley Madison looked like?

Justin: She's the... cupcake lady? Snack cakes?

Sydnee: The first lady? Dolley Madison?

Justin: Dolley Madison did do some snack cakes though, right? Right? Dolley Madison is—

Sydnee: Honey, she's the first la—she was a first—she was married to the president.

Justin: Dolley Madison—yeah, Zingers? [laughs] That's Dolley Madison? She did Zingers? Uhh... that's the main one, is Zingers, right now, for her.

Sydnee: [laughs] Well, maybe she'll come out with some new ones.

Justin: Maybe Dolley Madison will come out with some new snack cakes.

Sydnee: And if all else fails, maybe Dolly Parton will.

Justin: Maybe. I would eat Dolly Parton brand Zingers. Although, at the end, the two of them would be in legal hot water. And uh, we don't need that. Um...

Sydnee: Hey, Justin?

Justin: Yeah?

Sydnee: Let's... let's go to the billing department.

Justin: Let's go!

[theme music plays]

[advertisements]

Justin: So, Syd, where were we? Were we about to enter the Victorian era, if memory serves?

Sydnee: That's right. So, as we approach the Victorian era, as I've said so far, the main methods people use to rid themselves of freckles if they so desired... well, they didn't work. And so, makeup was often what people—

Justin: Sure. You cover them up.

Sydnee: Yeah. Relied on. Well, Queen Victoria called the use of makeup, um, impolite and vulgar.

Justin: Okay. Kind of cheating. Cheating for the face. Face cheats, I call them.

Sydnee: So, as a result, a lot of uh, people... and largely, again, these probably were mostly women, during the Victorian period, wanted to hide their freckles, but couldn't with makeup, because now, that had been declared vulgar. But they also weren't supposed to have freckles, because it was still the fashion to have very even-toned skin.

And freckles were also, at this point, associated more with like, the working class. Because if you were outside more, your freckles were more likely to show, whereas, if you were wealthy and could be inside all day...

Justin: Avoid the harsh rays, yeah.

Sydnee: Exactly. Exactly. So, you had to find a lot—you had to find some sort of product to remove your freckles, without hiding them with makeup. And this is where we see things like, Dr. MacKenzie's Improved, Harmless, Arsenic Wafers.

Justin: [laughs] I feel like putting 'harmless' in the name of a medication is like... especially if you follow it *directly* with arsenic, feels a lot like, methinks thou doth protest too much.

Sydnee: There's so much in this I love. They're improved.

Justin: Yes. Much better than the previous only mildly harmless arsenic wafers.

Sydnee: I was gonna say. Were they previously Dr. MacKenzie's Harmful Arsenic Wafers?

Justin: Yeah, hyper deadly.

Sydnee: Now, Dr. MacKenzie's Improved Harmless Arsenic Wafers, that you could just, y'know, rub on your skin, and... boom, freckles gone.

Justin: There it is.

Sydnee: Uh, people also—

Justin: And the good news is, it's harmless, we bet.

Sydnee: People were still using things like mercury, and also, carbolic acid.

Justin: Great! Man, you've gotta hate freckles.

Sydnee: To try to remove... yeah. To try to remove freckles. Um, obviously, all these things could damage your skin and make you quite ill.

Justin: "Hey, Justin, why are those little dots all over your skin?" Oh, these? They're scars. I did a terrible job with my carbolic acid.

Sydnee: But at least they're not freckles!

Justin: Not freckles, though. You gotta admit that.

Sydnee: The—I thought it was interesting. I found a note as to what... what was the thought process? People were trying to remove their freckles, or cover their freckles. Everybody hated their freckles. Did doctors weigh in at all, as to like, why did—I'm sure people went and said, "Why do I have these freckles? Is there something I could do, a medicine I could take, or a thing I could eat, or stop doing, to get rid of them?"

And people did, indeed, do that, and doctors did, indeed, have a theory as to why freckles happen. So, it's largely based on the theory of the four humors.

Justin: Okay.

Sydnee: Which we've talked about before, right?

Justin: Blood, bile, yellow bile, and... phlegm? No.

Sydnee: Ye—well, yes. Blood, phlegm, yellow bile, and black bile.

Justin: Black bile. Right.

Sydnee: So, you had to balance out your four humors in order to maintain health. And if you got too much of a humor, you could get sick in various ways, or too little of a humor... and there were foods you could eat to combat that, and then, if all else failed, we would bleed you, or make you throw up, or give you something that would... like a laxative or a diuretic.

Anyway. So, based on the humoral theory of medicine, during the summer months when it is hot, the liver naturally produces more yellow bile.

Justin: Okay.

Sydnee: Okay? You gotta follow this.

Justin: Okay.

Sydnee: This was—I don't know why. Because it was hot, I suppose. I have no idea why. But anyway, in the summer, the liver makes more yellow bile.

Justin: [crosstalk]

Sydnee: [laughs] So, the skin, at the time, was believed to be made up of like, a collection of molecules. Which, I mean, this is sort of true.

Justin: Correct. Technically accurate.

Sydnee: And that this contained oxygen and hydrogen and carbon. And it was thought that, when it was hot, oxygen would sort of separate itself from these other molecules, and absorb and bind substances around it.

Justin: [laughs] There's nothing funnier to me than people, once we got to a point where we did understand, like, the basic building blocks, and then just taking absolute shots in the dark about how they all, like, kind of worked together.

Sydnee: So, I mean, this is—and this is where things start to get really weird. So in the summer, the liver is making extra bile. It's floating around in your blood.

Justin: Okay...

Sydnee: And it was yellow, but there was also a brownish component to it, it was thought, related to iron.

Justin: Sure. Right. Rust in the body, yes.

Sydnee: And this is getting deposited in the skin, because there's so much of it.

Justin: Yes.

Sydnee: And binding to this oxygen that's in your skin, and is all excited, because it's hot.

Justin: Okay...

Sydnee: And then, you get a freckle.

Justin: Okay! It makes so much more sense now, Sydnee!

Sydnee: And if it happens to a large extent, you get a tan.

Justin: Ohh! Okay.

Sydnee: Now...

Justin: That's dumb. Like, that's dumb. It's easy to track the one to one on tans. That's not hard to track. I mean, what'd they think, that it was like, cooking you?

Sydnee: They thought it was the heat.

Justin: It's like, radiating... okay. Alright.

Sydnee: It was like, the iron being deposited into your skin, basically. But what's interesting about all this theory is that, because they blamed all this on the liver, on a problem with your liver, your liver is making too much bile,

and that's why this is happening... freckles began to be known as... liver spots.

Justin: Oh!

Sydnee: Which is a term that persists to this very day.

Justin: More applicable to like, the elderly, but...

Sydnee: Sure.

Justin: Same idea, though.

Sydnee: Which, they're talking about slightly different kinds—like, the larger freckles. Which still are related to sun. Like, the liver spots, or some people call them sun spots.

Justin: Yeah.

Sydnee: That's why we call them that. I've always wondered—

Justin: So we call them liver spots based on the humoral system? Wow!

Sydnee: Yes. That comes from the humoral system of medicine, which obviously is not true, but that's where that name come—and I've always wondered that, 'cause I know when a patient asks me, "Is this a liver spot?" I know what they mean, and I'll tell them yes, because what they're asking me is true. But I've always wondered, why do we even call them that? It has nothing to do with the liver.

Justin: That is so weird.

Sydnee: It's just sun. It's just sun and melanin. Why are we calling them that? That's why, because of the humoral system.

Justin: The humoral system. Wow.

Sydnee: So there you go. That's why liver spots are called—they have nothing to do with your liver.

Justin: That's cool.

Sydnee: Um, this is also why, however, doctors would prescribe you treatments for your freckles, at this point in history. Things like... bloodletting.

Justin: Oh, man.

Sydnee: Yeah. Or they would give you a laxative, or they would give you some sort of emetic. So something that would make you throw up. Just a way to—some—they were attempting to get the yellow bile out of your system to stop the freckles from forming. So... so there you go. That was the medical treatment for freckles.

Justin: Huh.

Sydnee: There were some other over the counter and kind of like, pharmaceutical creams that were invented. Things like Dr. Hebra's Viola Cream, that—

Justin: Which is great for maintaining your viola, for starters.

Sydnee: [laughs] Um, it's funny, because it contained mercury, which people didn't figure out 'til after they'd used it for a while. And then you could have like, at home recipes that you could make for yourself, like this pomade for freckles that has like, uh, citrine oil and oil of almonds, and the oil from a sperm whale, and some oil of roses.

Justin: Sure, yeah! I'll just get all those things. No problem.

Sydnee: Just get—like, you can easily obtain at home, oil from a sperm whale. I feel like some—this is like those recipes sometimes I find for slime that Charlie wants to make at home.

Justin: [laughs]

Sydnee: Where like, most of the stuff is stuff I already have, and then they'll throw in there like, "Also, some borax."

Justin: Borax! Yeah.

Sydnee: And I'm like, wait, what? I don't have any.

Justin: Some micro—some micro bead fill. Like, alright.

Sydnee: Yeah. And I'm like, well, I don't just have... and then, Charlie's looking at me like—

Justin: That stuff, by the way, y'all... the micro beads? Don't. Don't, don't, don't. They are these tiny, lighter than air things that are—

Sydnee: And if you breathe near them, they're everywhere.

Justin: Everywhere.

Sydnee: Like, as soon as you breathe. You don't blow on them, you just breathe, and they're everywhere.

Justin: Static electricity sends these things flying. You will *never* get them all out of your house. Please. Just like, if your kid is like, "Hey, this says we need micro bead fill," like, look them dead in the eye and say, "They don't make that anymore. It's illegal. And if any of your friends have it, they're criminals."

Sydnee: Justin made it illegal.

Justin: I made it illegal. Justin, a podcast, made it illegal. Podcast man Justin said this is a crime now, to have this.

Sydnee: Uh, so, we've talked, again, a lot about, now, freckles in the basis of like, cosmetic preferences, and standards of beauty, and then there was this association with, possibly, some sort of liver disease. In the late 1800s and the early 1900s, there was another reason why people attempted to hide their freckles, and unfortunately, a very racist reason.

Justin: Mmm.

Sydnee: So, freckles on a white person were seen as a sign that they were not completely... a white person.

Justin: Ugh.

Sydnee: And so, a lot of people attempted to hide their freckles to try to, um, maintain some sort of... racial purity...

Justin: Yeah.

Sydnee: Kind of, y'know, look, basically.

Justin: Unsurprising. Still gross and unsurprising.

Sydnee: Yeah, exactly. Exactly. Um, and uh, and unfortunately, there were a lot of very extreme measures that came out of that to rid yourself of freckles. Things like, I found this awful picture of somebody who was having a treatment done with dry ice, where they were basically just sitting in a doctor's chair and having dry ice applied all over their face to try to...

Justin: Yikes. Ugh. Eugh.

Sydnee: ... to get rid of them. And um, skin bleaches came out, to just bleach your skin.

Justin: Yeah. Yeah. Ugh.

Sydnee: So...

Justin: That's still a thing, right? People still...

Sydnee: Yes.

Justin: Still done. I remember hearing about—

Sydnee: Yeah, you can still find skin bleaches available. To use for freckles, and then, for skin lightening in general, if...

Justin: Lightening, yeah.

Sydnee: Yeah. And certainly, I'm talking—this episode is about freckles, and I'm talking about freckles. Obviously, these methods may have been employed by people who were people of color, trying to avoid discrimination.

Justin: Yeah.

Sydnee: Not just people with freckles who were discriminated against for that reason. It wasn't until tans began to become popular that freckles started to follow. And we talked about this on the—on our sunscreen episode, I think. That it was Coco Chanel. Right?

Justin: Oh, yeah.

Sydnee: Who fell asleep on her yacht, and came back with a tan.

Justin: And then, all of a sudden...

Sydnee: And then, all of a sudden, tans were popular. And as tans became popular, and they began to be associated—instead of a like, working class kind of view of tans, uh, people began to associate tans with being outside, and being, like, youthful and vigorous, and y'know... hiking, and... boating, and whatever. Whatever people—I don't know. What do people do outside?

Justin: I find that they're often employed to give a quality of like... like, girl next door. Y'know what I mean? Like, she's just... she's just regular folks.

Sydnee: Yes. She has a tan.

Justin: She has a tan.

Sydnee: And freckles kind of started to follow suit.

Justin: I meant freckles. I was talking about freckles.

Sydnee: Oh.

Justin: Like... y'know what I mean? Like, I feel like freckles are like, employed to do the like, you grew up next to her your whole life, and now, you're in high school together. Y'know what I mean? Like, that gross trope.

Sydnee: Well, I do think—I think that, in the—in like the fashion world, that is what freckles began to... like, represent. Y'know, freckles and a ponytail, and then, all of a sudden, you were youthful and... y'know, you're Betty Cooper, right? Like, that's what we're going for?

Justin: Yeah. Well, Betty Cooper had blonde hair, right?

Sydnee: Yeah.

Justin: And I don't think she had freckles either, right?

Sydnee: She could've.

Justin: She could've. That's true. Lots of people could've had freckles.
[laughs]

Sydnee: I don't know. Two-dimensional comic book character. They didn't have a lot of...

Justin: Ah! I was thinking of Betty Draper. My mistake. Sorry. [laughs]
That's on me. Sorry.

Sydnee: Okay, no. From Archie. Betty Cooper.

Justin: Yes. Got it.

Sydnee: I mean, she was no—I mean, there are no freckles on her face, but I think it would be very hard to represent that easily.

Justin: That's true.

Sydnee: I don't know. Betty Cooper could've had freck—it didn't matter.

Justin: Nobody over at Archie Comics has time to draw all those freckles. They even skip them on Archie sometimes.

Sydnee: Girl next door. So, by the '90s, not only were freckles acceptable, they were sought after. So much so that, in 1995, Chanel introduced the first faux freckle pencil. And you will see this... actually, it's very common on runways. You'll see a lot of models who have been, um, made up with faux freckles. And not only just like, in an attempt to look like natural freckles, but like, multicolored freckles, like purple and pink and red.

Justin: And you know those are fake.

Sydnee: Right. I mean, those obviously are not meant to be real freckles. But they're used, again, to give the fashion line like, a hint of like, look at these young, healthy people.

Justin: Vibrant.

Sydnee: Fresh-faced youth, with their beautiful freckles. And obviously, our definition of beauty, when it comes to complexion and skin color and everything, is much better. Much broader than it used to be. We are not encouraging everybody... we have veered far from the days when you may,

for instance, get tuberculosis, so that you would have a very pale, gaunt look.

Justin: Right.

Sydnee: Because that was in style for a while. Obviously, we've moved far away from that, and uh, whether you have freckles or not, all of it is beautiful.

Justin: There you go, Syd.

Sydnee: And great. So, in terms of medicine, though, freckles clearly are not related to liver disease.

Justin: Thank you.

Sydnee: So, I mean, feel free to call them liver spots if you want, 'cause everybody knows what you're talking about, but... they're not.

Justin: But then, drop that trivia on them.

Sydnee: They're not related to your liver. Um, they have nothing to do with dark magic. As far as I know. I'm not an expert in that arena.

Justin: Thank you for clarifying.

Sydnee: Yeah. But they're not. Um, as you said, Justin, freckled people generally may be at higher risk of skin cancer. So, if you are somebody who has a lot of freckles, it might be a good idea to get regular skin checks with your doctor. And what I mean by that is, we just kind of strip you down and look at you head to toe.

Justin: Look at your whole butt.

Sydnee: Well, yes, your butt, but like, all the other parts, too.

Justin: Sure, sure, sure. Sure sure sure.

Sydnee: I mean, that's not the most common place to get...

Justin: But I know where y'all start, and I know where y'all like to linger.

Sydnee: No.

Justin: No?

Sydnee: No.

Justin: My mistake.

Sydnee: [laughs] But it's good to get regular skin checks, and if you see anything that you don't like the look of, go in and have your doctor check it out right away. Freckles are not cancerous, though. I think it's important to make that distinction. Even though it puts you at higher risk of skin cancer...

Justin: They're not, in and of themselves...

Sydnee: The freckles themselves are not going to become cancer. It's just, the association. The genetic association.

Justin: Got it.

Sydnee: They are linked to sun, definitely. So, if for whatever reason, you don't like your freckles...

Justin: Stay out of the sun.

Sydnee: If that's your preference, yeah. You should stay out of the sun. You should wear your sunscreen anyway.

Justin: Everybody should be wearing their sunscreen. Are you kidding me? It's 2018! You know better!

Sydnee: Yeah. You should wear your sunscreen. I mean, 'cause if you—I found this note again and again, and I hadn't really ever thought about it. You're not born with freckles.

Justin: Mmm.

Sydnee: Have you ever seen a freckled baby?

Justin: No.

Sydnee: No. It's sun exposure.

Justin: Really?

Sydnee: You have the pre—I mean, the melanocytes are there.

Justin: But...

Sydnee: But it's the sun exposure that triggers the melanin production, and makes freckles happen. So, y'know, you should—and obviously, you don't need to wear your sunscreen to avoid your freckles. I think freckles are really lovely. I've always wished I had them.

Justin: But, it's just—

Sydnee: I just have them on my shoulders. I have very freckly shoulders, but I've never had any on my face.

Justin: But the important thing is, wear your sunscreen.

Sydnee: But yes, you should wear your sunscreen. Whether or not you like the look of your freckles, please wear your sunscreen.

Justin: Freckles or no.

Sydnee: Stay out of tanning beds. Avoid burns at all costs. Wear your sunscreen. And embrace your freckles.

Justin: And destroy all tanning beds. That's my new thing. I'm actually gonna get a shirt.

Sydnee: Destroy all tanning beds?

Justin: Destroy all tanning beds. What do you think about that?

Sydnee: You can do that. I'm just gonna keep pushin' the sunscreen.

Justin: No, I love that. We should work at it from both angles.

Sydnee: You gotta reapply. If you've been wet or sweating a lot, you definitely need to reapply. That stuff wears off.

Justin: Um, thank you all so much for listening to our podcast. We hope you have enjoyed yourself. Please, just wear your sunscreen. If you take nothing else away from this, please just wear the sunscreen.

Uh, I want to say thank you to people who sent some stuff in the, uh, P.O. box. We got a blanket from Sarah, Braxton sent some beautiful troll cards, Grace sent a goop needlepoint that is out of control funny. Georgia sent a book, Ava sent a book, Cheryl sent a tardigrade purse. Ilem for the OB textbook, Kelsey for matching hats... I'm sorry if I mispronounced that, Ilem. I took my best shot.

Uh, Aisling sent graduation brainstem and necklace, and Kristen sent beer and glasses. So, thanks y'all for the gifts. We appreciate it. And of course, all the cards and letters and wedding invites. We read it all, and appreciate it all, and wish we lived the sort of lives where we could respond to it all. That would delight me to no end. I very much wish.

Sydnee: And come to all your weddings.

Justin: Yeah, I would love to come to all the weddings, but... here we are. Um, thanks to the Max Fun network for having us as a part of their extended podcasting family. You can find all their great shows at MaximumFun.org. And thanks to the Taxpayers for the use of their song, Medicines, as the intro and outro of our program.

I believe, Sydnee, that is going—ooh! Got a book! Makin' a book! Coming out in October! Bit.ly/SawbonesBook. Words by us, illustrations by Teylor Smirl, Sydnee's sister and a very talented artist.

Sydnee: And check it out. You can see the cover now. Oh, it's so cool lookin'.

Justin: Yeah, it's really cool.

Sydnee: I'm so excited.

Justin: If you go to bit.ly/SawbonesBook... oh, they do have the cover in there! Go look at the cover. You're gonna adore it. Um, but preorder it now, and it'll be out soon. And... thank you for doing that. We really appreciate it.

But that is gonna do it for us for this week, so until next week, my name is Justin McElroy.

Sydnee: I'm Sydnee McElroy.

Justin: And as always, don't drill a hole in your head!

[theme music plays]

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