Sawbones 136: Bezoars

Published May 12, 2016 Listen here on themcelroy.family

Intro (Clint McElroy): Sawbones is a show about medical history and nothing the hosts say should be taken as medical advice or opinion. It's for fun. Can't you just have fun for an hour and not try to diagnose your mystery boil? We think you've earned it. Just sit back, relax, and enjoy a moment of distraction from that weird growth. You're worth it.

[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:

[sighs]

Sydnee:

Are you sad, Justin? Why are you sighing like that?

Justin:

Well, Syd, it's a tough day, isn't it?

Sydnee:

It's a tough day?

Justin:

It's a hard day. Uh, today, May 11, 2015— '16.

Sydnee:

It's '16. It's definitely 2016.

[groans] '16. Marks the end. This is the end of the combo.

Sydnee:

It was too much pressure, frankly, Justin.

Justin:

The combo, friends, has seen us through. Let's just go through it one more time. What's the first one?

Sydnee:

[laughs], great. Good. I'm glad we remembered that—

Justin:

Hemophilia?

Sydnee:

Hemophilia was the first one, which led to... Was that hydrogen peroxide?

Justin:

Hydrogen perox— No. Hm. No. Yeah. Yeah.

Sydnee:

Yeah. And then, earwax, and then earaches. And then tinnitus.

Justin:

Yes. Hemophilia, hydrogen peroxide, ear wax, earaches, goofiest medical questions, 'cause we had a hard week, and then tinnitus, continuing the combo. But now, the combo's well and truly—

Sydnee:

It was too much pressure, guys.

Justin:

[singing] I will remember you... Will you remember me?

[overlapping] It's kind of like, you know how, like— I'm sure, Justin, you can relate to this. You know how, like, you didn't get, you didn't get any Bs all the way through school, and you were in your junior year of college and you still had not, never gotten a B.

And you just kept thinking like, "Oh, my gosh. At some point in my life I'm gonna have to get a B and I'm gonna break my perfect streak of As. And then, my whole world is gonna collapse."

Justin:

Yeah. Uh, I think we've all had that exact line of thought, with that exact level of intensity.

Sydnee:

And then, in your junior year of college maybe you finally got that first B. Maybe it was your only B. Maybe that's anybody can ever say about you is that was your only B, but maybe then you finally got it and it was a little bit of a relief.

Justin:

Yeah. I can understand. So this part's—

Sydnee:

Maybe you don't still think about it every night when you try to close your eyes.

Justin:

This marks the end of the combo. What is, uh, what does it mean for us Sydnee? What do we turning to today?

Sydnee:

Something totally bizarre.

Justin:

Not ...

Sydnee:

[laughs].

You are looking very self-satisfied. Why are you looking so self-satisfied?

Sydnee:

Because it's bezoars, which sounds like, bizarre.

Justin:

Whoops-a-daisy. Okay. That's fun, I guess. That— I'll allow it. Um...

Sydnee:

Bezoar or I think...

Justin:

Bezoar.

Sydnee:

... some people say, bee-zoh-ar, bay-zoh-ar, bezoar.

Justin:

What is—

Sydnee:

Bezoars.

Justin:

I have no idea. What's a bezoar?

Sydnee:

You don't know what they are? You've read Harry Potter. You know what they are.

Justin:

Is it a Horcrux?

Sydnee:

Nope. Nope. Not a Horcrux. Not a thing...

What is—

Sydnee:

... like in real life.

Justin:

What is it?

Sydnee:

Okay. So first of all, thank you, Corin, for recommending this topic. Um, I think bezoars are super cool and I'm really excited to talk about 'em, so I don't think anybody's gonna be too mad that we broke our streak. They sound very magical, don't they?

Justin:

Uh, yeah, they have a kind of fantastical— I guess I could grant you that.

Sydnee:

I would go ahead and posit that they are not magical. I would say—

Justin:

Well, that seems like a fair bet.

Sydnee:

I would say that they are what many, many humans might refer to as gross.

Justin:

But not magical?

Sydnee:

No. But not me either. But then, we've already established I have issues. So a bezoar is a collection of undigested or inedible material of some sort, some kind of material, that is kind of found in a lump in the GI tract of either a human or an animal.

| Like a hairball? |
|--|
| Sydnee: Yeah, a hairball is one example of a bezoar. |
| Justin: Oh, that is one? |
| Sydnee: Yeah. |
| Justin: Okay. |
| Sydnee: Like a big mass, big lump of something that you can't digest or you probably shouldn't have eaten in the first place. And it's just sitting there, usually in your stomach, but it can be anywhere in the GI tract. And like I said, we can find it in humans or in any creature, really. |
| Justin: Is it a tumor? |
| Sydnee: No. |
| Justin: So, how would you say that? |
| Sydnee: [laughs]. It's not a tumor, Justin. |
| Justin: Ah, one more time. Let's take another pass at that. |
| Sydnee: Really? Is this really? You really— |

Yeah. We're just gonna need you to brighten up the A, kind of—

Sydnee:

[Arnold Schwarzenegger impression] It's not a tumor.

Justin:

...that's kind of a dark A. Okay. Perfect. Okay. Love it.

Sydnee:

Okay. So they can be named based on what's in them. So you mentioned a hairball.

Justin:

Right.

Sydnee:

We would probably call that a trichobezoar.

Justin:

No, I think we'd probably call it a hairball...

Sydnee:

[laughs].

Justin:

...as we've established in the preceding three minutes of this program, and also, uh, hundreds of years of human history.

Sydnee:

Although, let me say this—

Justin:

I would probably call it a hairball.

I don't know if, like, it distinguishes itself from a hairball in that, like hairballs, I usually find on the carpet after the cats have, like, hocked them up. And a trichobezoar, in theory, you wouldn't find on the carpet because it's still in the stomach.

Justin:

Well, then let's be-

Sydnee:

It's sorta like a meteor and a meteorite. You know?

Justin:

Let's, let's also get like super, super, super honest about hairballs. That's a very sweet name. It's vomit. It's hair vomit that they puked up all over everything.

Sydnee:

[laughs]. Which is something different because some of that vomit may have been digestible.

Justin:

Right. But it just got mixed up with the puke on the way out, I guess...

Sydnee:

With all the hair.

Justin:

... because they had them hanging in there?

Sydnee:

Yeah. There's also phytobezoars which are made—

Justin:

Dogs.

Sydnee:

No. What?

| It's Fido. |
|---|
| Sydnee: Ah. [laughs]. Okay, I guess. No. P—H—Y. Phyto. |
| Justin: Oh. |
| Sydnee: They're made of plant stuff. |
| Justin: Okay. |
| Sydnee: And then there's a trichophytobezoar. Can you guess that one? |
| Justin: I don't have a funny, funny thing for that. |
| Sydnee: It was hair. Hair and plants, both. |
| Justin: A little bit of everything. |
| Sydnee: There's also like lactobezoars, which are, like, milk. Um, especially in, like, neonates that can't necessarily digest milk yet. And then there's pharmacobezoars which are usually when people take too many of, like, sustained release pills, and all those, like, sustained release capsules form this ball of undigested |
| Justin: Eh. |

... capsule, pill material in the stomach.

Justin:

Grossarooni. I didn't know that was a thing.

Sydnee:

That's a pharmacobezoar. Yep. The word though, 'bezoar-'

Justin:

So like those Dexatrim pills that have all the little ... I used to love the look of—

Sydnee:

[laughs].

Justin:

When I was a kid, I used to love pills that had like the tiny little pills inside of it. You know what I'm talking about?

Sydnee:

Like what? [laughs]

Justin:

You know pills that have—

Sydnee:

The pills that have pills inside of them?

Justin:

Pills that have like tiny little... They're filled with like tiny little pills.

Sydnee:

Did you do a lot of pills when you were a kid?

No. I just like the way they look. Like Dexatrim, ironically, used to make me hungry for candy.

Sydnee:

You mean like capsules that are filled with the little dissolvable bits of material.

Justin:

Yeah. Yeah.

Sydnee:

Okay.

Justin:

I mean, I guess I'm taking a little bit of license by saying they're tiny pills, but I mean, they're tiny pills.

Sydnee:

I don't think they're tiny pills. I mean, it's a pill.

Justin:

Do you swallow them? Are they medicine? Are they small solid objects?

Sydnee:

Yeah, but then, by that definition you can make Nerds pills.

Justin:

Are they medicine? Okay? [laughing]. That was the third— Sorry, doc. Have Nerds been medicine this whole time?

Sydnee:

Okay. Well, no. That's fair. I missed that criteria. [laughing].

Justin:

What a twist that was gonna be.

I could use some Nerds.

Justin:

You're gonna get your money's worth on this episode. [laughs]. Nerds are medicine.

Sydnee:

The word—

Justin:

Says a doctor.

Sydnee:

The word bezoar comes from either the Arabic word, bazahr, or the Persian word, padzahr. Either way, these words refer to, like, an antidote or a counterpoison, which is really interesting.

Justin:

That's... Yeah. That's odd.

Sydnee:

Well, this is because we used to take these lumps or balls or collections of hair or husk or vegetable matter or whatever, some sort of matter, and we would give them to people to ingest as cures for poisoning. Like for a really long time in history, we did this.

Justin:

Um, gross.

Sydnee:

So [laughs], yeah. So I'm gonna tell you about this. We have found bezoars in animals for a really long time and we didn't quite know what to make of them initially. Um, and, uh, this was probably just by, like, the fact that we were killing and eating animals and—

Justin:

Mm-hmm.

Or animals died and we would just find these odd things kind of hanging around afterwards. Uh, there were theories, like really strange theories that I read initially of like, "Where could these have come from?" Which especially is strange when you consider that they were often found inside a stomach, but I guess these weren't, necessarily.

Because one theory is that, like, maybe if a deer ate a snake and then that deer got stuck in some muddy water, and so as it was, like, sinking into the muddy water and dying, it started crying. And then those tears of this deer that ate the snake that's sinking into the muddy water became bezoars. Justin: Okay. Sydnee:

Which, I just keep picturing that scene from NeverEnding Story.

Justin:

Oh, what? With, uh-

Sydnee:

Atreyu and Artax and—

Justin:

Atreyu and... Ah, heartbreaking.

Sydnee:

I know. But I was thinking—

Justin:

I was traumatized by that series.

Sydnee:

It was rough.

It was rough. I was just a little kid.

Sydnee:

It's okay at the end, though.

Justin:

Mm-hmm. Okay.

Sydnee:

It's all okay. Don't worry. But in this situation, the deer would cry and the tears would become bezoars, which seems a little more far-fetched than "we found this lump of hair in a stomach."

Justin:

Yeah, but who wants to tell that story?

Sydnee:

[laughs] They also thought it may just be the animal's natural defense against poisoning.

Justin:

It would catch it up in a ball of hair?

Sydnee:

Exactly. So, like, they find these balls of stuff and they're like, "Ah, this is all the poison the animal ingested," which is just now all stuck in this ball, and so it didn't die. It died for another reason.

Justin:

Yeah.

Sydnee:

Because we killed it and ate it.

Justin:

Right. Delicious. Mm. Pass the more animal please.

Uh, we find the mention of the term, the word, bezoar, when we go all the way back to our buddy, Pliny's time. Pliny the Elder. But it's fair to say that even when he talks about bezoars, he only does so in referencing what he calls, the Persian word.

Justin:

Okay.

Sydnee:

So he's already saying, like, "This isn't something from my medical tradition or something I really understand and know much about. I'm just kind of stealing this from, like, the Arabic tradition of medicine."

Justin:

Okay.

Sydnee:

Um, we know the use of bezoar for medicine dates back to at least the 1100s.

Justin:

Okay.

Sydnee:

Um, and by the 1200s, they— It'd become pretty widespread. Uh, mainly the kind of bezoars that you might use for medicine... I'm gonna tell you some of the uses. Mainly counterpoisons, but there are some other things they were used for too.

Uh, the ones that were highly prized were taken from cows and goats, usually. That started throughout Asia and then spread over by the 1200s most of Europe was also trying this out as well.

And, the way that you could use them, and they would be called bezoars or bezoar stones, and you could either put them into a glass of, like, water or wine and then just drink the liquid. But that wasn't really thought to be as effective as either, like, scraping it and dissolving it into some liquid and drinking it.

Justin: Yeah. Sydnee: Um, or I guess, just swallowing the whole thing in the worst case scenario. Justin: What a wonderful example of really using every part of the buffalo. Or I mean, literally, I guess, in this case, but really just not wanting to let anything go to waste, huh? Sydnee: "Well, we did really great, Bob. Anything left over there?" Justin: "Well, there's a chunk of hair. There's a big ball of hair. Undigested hair." **Sydnee:** "Yeah. No. That's, uh, that's for poison." Justin: "That's medicine." Sydnee: "That's for poison." Justin: "That's medicine. Grab it."

Sydnee:

"That's medicine right there."

Justin:

"You grab it. I don't want to grab it. I've grabbed so many. I just want to—"

"Grab it and put it in this leather sack, and I'll carry it around on my hip." [laughing] "That won't freak people out. I know how to make friends."

Justin:

[laughs].

Sydnee:

It was also used, uh, during plague times for, um, for treatment of plague victims.

Justin:

Sure.

Sydnee:

And that also made it more widespread and more popular, um, as well as for envenomations. So, like, if a snake or something bit you...

Justin:

Oh, okay.

Sydnee:

... you may be told like, "Ah, just get a bezoar." You know, go find a bezoar.

Justin:

What? [sighs] Why?

Sydnee:

Uh, like I said, part of the theory was that it was the animal's natural defense against poisoning and then they would look at some of the foods.

Like, one of the things we're gonna talk a little bit about are porcupine bezoars. And part of the theory as to why porcupine bezoars would eventually become so highly prized was because porcupine ate a lot of, like, really bitter food.

Justin:

Hm.

And a lot of, like, tough plants that humans wouldn't want to eat. And so, the thought was, like, if they can eat that, they must have—

Justin:

Then their hair, their stomach hairballs—

Sydnee:

It makes it really tough.

Justin:

Are pretty good?

Sydnee:

Yeah. Their stomach hairballs must be really tough.

Justin:

Sure. Okay.

Sydnee:

So they're really good at counteracting poisons.

Justin:

All right, humans. I'm sorry. I'm not seeing where you're coming from on this one.

Sydnee:

Um, the use of these was spread, uh, a huge amount through the crusades, but also by trade routes because these became very popular items for trading. They were, they were very expensive.

Justin:

Sure, they were shelf stable, which is nice.

Sydnee:

Yeah. And they weren't easy, necessarily, to find.

Mm-hmm.

Sydnee:

So you would pay a pretty penny if you wanted a bezoar. And they were main— They were highly prized by the courts of Europe. And so, this was definitely something, you know, if you were a noble, if, you know, this was something that a king or a queen would want easily at their disposal, you know...

Justin:

Right.

Sydnee:

... that if you were a well-to-do medicine man at the time, you would probably want to have these in your arsenal to, you know, cater to your richer clients, for sure.

Justin:

Yeah.

Sydnee:

Um, and as a result of this, like with anything else, fake bezoars started appearing on the market.

Justin:

I was actually just sitting here wondering why more people weren't doing that. They don't work anyway, so like, what's the difference?

Sydnee:

No. Exactly. There was [laughs]... And because of the kinds of materials they're made of, you can imagine they were really easy to fake.

Justin:

Yeah, of course. It's a ball of hair.

It's just, like, hair and straw and vegetable stuff and whatever, and you just kind of mash it into a ball and...

Justin:

Done.

Sydnee:

There you go.

Justin:

Yeah.

Sydnee:

You got a bezoar. And you're right, since they weren't gonna work, who knew?

Justin:

Who's gonna catch you? Yeah.

Sydnee:

Uh, so, you begin to find, like, at this point in time, like, bezoar experts popping up here and there, who could describe to you what a real bezoar from various animals looked like. For instance, like, if you were gonna get a real bezoar from a goat, it should be aubergine.

Justin:

Okay. Now, why is that?

Sydnee:

That's just the color of the goat bezoar should be.

Justin:

All right. Well, okay.

Sydnee:

So there you go. So then if somebody tells you it's a goat bezoar, and it's not aubergine, you should be suspicious.

Yeah. I'll try to keep that in mind. [laughs].

Sydnee:

They were used a lot too, in medicine. If you look at a lot of the recipes in kind of, like, potions or whatever for bezoars at this point in history, you'll see that they're paired with unicorn horns. Which gave me a huge pause because I was, like, "Is all of this made up then?"

Justin:

Yeah.

Sydnee:

Hold on. I've been reading all of these accounts of bezoars and now we're mentioning unicorn horns. And so like I'm thinking, "This is all fiction. I've been tricked."

Justin:

Yeah. It's been pure insanity this whole time. But what— But I think a lot of people probably get confused occasionally as to whether or not unicorns are real. Like they realize that they're not, but they don't instantly remember that they're not. You know what I mean? Sometimes it takes them a little while.

Sydnee:

Does that— Is that— Would you say that's a personal problem Justin?

Justin:

Yeah. The moment between asleep and awake, when you can still remember your dreams.

Sydnee:

Yeah, it's the moment that I sit and wonder about that one B that I got in college.

Justin:

Yeah. [laughing].

| Sydnee: Unicorn horns were probably goat horns. |
|---|
| Justin: Oh. Okay. |
| Sydnee: Just so you know. |
| Justin: Just taped on there. |
| Sydnee: [laughs]. And I think people knew. Like, I think, I don't think this was a mass, like, delusion, like, "Ah, get that horn off that goat." "It's a unicorn horn!" All of a sudden. Like, I mean, I think people knew. |
| Justin: Yeah. |
| Sydnee: Uh, in India, they were used. They had other uses as well as, like I said, for counterpoisons and antidotes. Which is, by the way, I should mention that it part of why they were so popular among royalty. |
| Justin: Mm-hmm. |

Is because they were—

Justin:

Poisoning?

Sydnee:

Yeah. They were trying to off each other all the time. Right?

Yeah. Game of Thrones.

Sydnee:

I was gonna say, that's what Game of Thrones is all about, I think.

Justin:

Yeah, constantly.

Sydnee:

Probably, that and Dragons in Winter.

Justin:

Mm-hmm.

Sydnee:

That's the whole show.

Justin:

Yeah. All that. You've got all the... Yeah. You got all the big points.

Sydnee:

Are there bezoars in it?

Justin:

Uh, not that I've seen. But maybe behind the scenes or deleted scenes. You know?

Sydnee:

Because if any of them are getting poisoned, they should probably just have some bezoars.

Justin:

I mean, they probably shouldn't because they're fake and don't work. So it's kind of at their own discretion, I guess.

In India, they also use them for depression or any kind of melancholic disorder. You could use, like, a bezoar. Uh, if you had bleeding problems, you may be prescribed a bezoar. Fevers.

Um, and they would often be used, even almost like a tonic or like a preventative measure, like for vigor. Uh, rich people would often just dissolve one in a drink like twice a year, like, to take their biannual tonic.

Justin:

Oh, not something I'd look forward to.

Sydnee:

A bezoar? It was basically like a flu shot, almost. Like did you—

Justin:

Yeah.

Sydnee:

It's winter. Did you drink your bezoar yet?

Justin:

Drink your bezoar? Ugh.

Sydnee:

Um, except afterwards, you puked a lot.

Justin:

Sure.

Sydnee:

Which is not at all like a flu shot.

Justin:

No.

Um, one, as I mentioned, the porcupine bezoar became very popular at this time and was very highly prized. It was described as, because you need to know, right? You need to know what it looks like so you don't get tricked.

Justin:

Yeah, you don't want to get it, a scam run on you.

Sydnee:

A porcupine bezoar would be small, vermilion, clear. It would have a very bitter taste and a feel, it would feel in your hand much like French soap.

Justin:

Um...

Sydnee:

Not just any soap.

Justin:

French soap.

Sydnee:

French soap.

Justin:

Maybe French soap was made out of porcupine bezoars some time. Nobody knew.

Sydnee:

Hey.

Justin:

Hey. What's up? History's greatest mysteries on earth.

Sydnee:

When we're done, let's call France and ask.

Okay. Um, so-

Sydnee:

And then, this one was thought to be a very potent healing agent, and um, it was especially good for the stomach, strangely enough.

Justin:

Um, so do these work? Do they work?

Sydnee:

Well, mm, okay. There's a little bit. There's a little bit to that.

Justin:

Really?

Sydnee:

Just a little.

Justin:

Oh, my gosh.

Sydnee:

Just a little. I'm not saying they work. But before I tell you all the details, why don't you follow me to the billing department?

Justin:

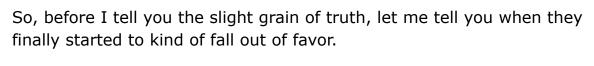
Let's go!

[theme music plays]

[ad break]

Justin:

Okay. You were telling me that there may be some sort of slight grain of truth here.



Okay.

Sydnee:

When we realized that all of the claims were probably not true.

Justin:

It probably took us too long, I'm betting, but if—

Sydnee:

[laughs]. We've talked about Dr. Pare from, uh, from about the 1500s, who was a groundbreaking physician from France, and a surgeon, and we've discussed him in past episodes.

Justin:

Mm-hmm. Am-

Sydnee:

One other thing—

Justin:

Ambrose, ambraw, brose?

Sydnee:

Yeah. Exactly. [laughs]. Very good. Keep, we'll keep working on our French.

Justin:

Ambroise?

Sydnee:

And by the time we're done with this podcast, someday, we'll know how to say his name appropriately.

Okay. I'm gonna do— I'm gonna let you keep talking.

Sydnee:

I say it different every time. I think I'm always wrong. Um, I do practice. So he disproved this with an experiment that I would wager would not, um, pass IRB muster today.

Justin:

Yeah.

Sydnee:

Which means, like, it wouldn't be allowed to happen. So in the 1500s, there was a cook in the king's court who was found to be stealing silver. And as was the fashion of the time, if you are stealing things from the king, you get sentenced to death.

Justin:

Right. Can't have that sort of thing.

Sydnee:

Exactly. So he was supposed to be, uh, killed by hanging. Uh, however, Dr. Pare interceded on his behalf and said, "Hey, listen." Well, maybe not so much on his behalf, more on like medicine's behalf.

Said, "Hey, listen. This looks like a great opportunity for us to test out a theory. Instead of him choosing... Let's give him the option. Either we'll just go ahead and hang you or instead we will give you poison and then you'll swallow a bezoar and we'll see if you live."

Justin:

Oh, that's so good.

Sydnee:

"And if you live, you get to live. You're done. Like you walk away, scot-free." Like, you probably don't get to still work for the king, because, like, you stole his silver. But like you live, that's fine. Or you just, you know, you'd hang. Either way.

| Justin: |
|--|
| Either way. |
| Sydnee: So, this guy went for the poison and the bezoar. |
| Justin: Double or nothing. [laughs]. |
| Sydnee: Because, I mean, who wouldn't? |
| Justin: Yeah. |
| Sydnee: And he lived seven hours. |
| Justin: Hey, that's something. Better than hanging, I guess. |
| Sydnee: Shh. I don't know. I don't know what poison it was. I don't know any details. |
| Justin: Yeah. Not a lot of poisonings are, like, chill. |
| Sydnee: They're not, like, most of them aren't fun poisons. |
| Justin: Not fun poisons. Not chill poisons. By the way, Syd, amb-royce. |
| Sydnee: Ambroise. |
| Justin: |
| |

That's what Google says.

Sydnee:

Okay. We'll try to get it right from now on. Anyway, that should've put the theory to bed once and for all. Of course, like always—

Justin:

Of course not. Why, why let facts get in the way?

Sydnee:

[laughs] That didn't stop anyone. Uh, they were still being used in the 1600s. When there's a really interesting court case, that kind of, uh, surrounded around, that kind of involved a bezoar. So in 1603, there was a case, uh, Chandelor v. Lopus, which was a famous, like, British common law case that's referenced, because it established the rule of caveat emptor.

Justin:

Oh, okay.

Sydnee:

Or... Do you know what that means?

Justin:

Buyer beware.

Sydnee:

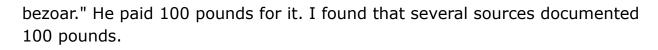
Exactly. Thank you. I was gonna let you have that one.

Justin:

Thanks. I appreciate it. Leave the low hanging fruit for the village simpleton. I get it.

Sydnee:

[laughs] The story is there was a man who went to a store, or I don't know, a tent somewhere, whatever, wherever people buy bezoars. And he bought one, and he was told that it was from an animal's stomach. Probably. Probably. The guy was, like, "Yeah, I'm pretty sure, this is, this is a real deal





Wow.

Sydnee:

Which at that time, is crazy money.

Justin:

That's, like, a lot of money.

Sydnee:

That's crazy money back then.

Justin:

That's wild.

Sydnee:

So he paid 100 pounds for this bezoar. Um, it didn't work as promised. Now, I, for the life of me, I wish I had the details of this because I don't know what happened, that he figured out it didn't work. I don't... It's not—

Justin:

Yeah.

Sydnee:

I mean, it's lost to history.

Justin:

Yeah.

Sydnee:

I don't think anybody knows for sure. But something happened. He came back and said, "Hey, listen. This was fake. It's not a real bezoar. I want my money back." Uh, they ended up in court and buyer beware became the law of the land.

I'll tell you where we went wrong, um, what a lot of the, like, natural medicine dealers and nontraditional medicine dealers have learned, is that if you make your prices low enough that people can just write it off as some harmless fun, you can skirt, uh, a lot of heavy investigation that way for a good long while. You can't charge this much for a bezoar and expect to stay in business.

Sydnee:

How much do you sell your bezoars for, honey?

Justin:

Me? \$24.99, absolutely. And your satisfaction, by the way Sydnee, is guaranteed.

Sydnee:

[laughs]. You know, I'm not surprised that people are like, "Yeah, that's fine. I'll let it pass."

Justin:

It's fine. Whatever. \$25 bucks is like, I think that's what you should charge for any fake thing. [laughing]. It's like a good amount of money, because if you get \$25 bucks, like, "Yeah. Cool. I love it." But if you lost \$25 bucks to a scam, you're not gonna go to, like, the police. Not for that.

Sydnee:

[laughs].

Justin:

It's not worth it. You know?

Sydnee:

I don't know. \$25 is a lot of Nerds.

Justin:

Yeah, no kidding. Like, absolutely.

So in the 1600s, as well, we see the introduction of, um, by a Dr. Samato, who was a Portuguese physician, who, like, by the way, I want to give him a little credit 'cause he introduced Quinine for malaria to Portugal. So like, cool. Good. Good going.

Justin:

Cool. That one's good.

Sydnee:

Good, good job. He also made, like, a cordial out of bezoar stones. Which I just like to mention, 'cause I love the idea of, like, a bottle of cordial. Because cordial always sounds very fancy, and like something sweet and syrupy.

Justin:

Oh, yeah.

Sydnee:

And, like yummy. And I mean, like, it's what Mary Poppins gave her charges, right?

Justin:

She has lime cordial, right?

Sydnee:

I don't know. Yeah. I guess she has lime cordial.

Justin:

It's her flavor.

Sydnee:

That's right. She had... No. She had rum punch.

Justin:

Rum punch.

Sydnee:

Yeah.

Michael got one cordial.

Sydnee:

And she rolled her tongue. Grrum, grrrum punch.

Justin:

Grrrrum punch.

Sydnee:

Like that, yeah. Um-

Justin:

We've watched Mary Poppins 40 times. Our baby loves it. [laughing].

Sydnee:

Uh, in the 1700s, because of all the sketchy, fake bezoars out there that could've been made of anything, and maybe something dangerous, um, the Portuguese Jesuits actually started to make their own fake stones. Except for let's not call them fake, now, they're artificial.

Justin:

Okay.

Sydnee:

So, you know, there aren't enough naturally occurring bezoars to go around.

Justin:

We got to cook some up.

Sydnee:

We'll make some artificial ones. And this is totally like, they were not lying about this. "We are making artificial bezoars that should work just like bezoars, but—"

Justin:

And it was, to their credit, they did. I'm sure.

[laughs]. And so, they were made out of all kinds of things. They were made out of amber and musk and rubies and emeralds and, like, fancy things, like topaz and ivory and garnet and coral. Also though, dirt and also some unicorn horn, and also some stag horn.

Justin:

Right.

Sydnee:

Then, like I said, this was an honest effort to try to limit the dangerous fake stones that were out there that might make people sick. Um, they called them the goa stone. And goa stones actually became as highly prized as real deal bezoars after a while.

Justin:

Yeah, because these dumb monks are stuffing them with gemstones.

Sydnee:

[laughs]. This continued until about the 1800s and we finally started to see bezoars fall out of favor. Um, and though you could still buy them, the kind of craze, there was enough, you know, people believed enough by then that like, "Hey, we keep taking these things. People keep dying of poisoning. I don't think they're working."

Interestingly, I will say this, just some, some real things about bezoars. One, they do kind of bind arsenic.

Justin:

Huh.

Sydnee:

Uh, especially depending on what kinds. The ones made of hair, in particular. There have been some studies done that say, "Yeah, they may work a little bit on arsenic." Now, I don't know how much.

That's ridiculous Sydnee.

Sydnee:

It's just that, it has to do with exactly the chemical reactions that occur between the molecules, like, in the hairball and in the arsenic.

Justin:

That's so wild.

Sydnee:

Anyway, so they may a little bit. Now, I don't think I'd want to chance this. I don't think I'd want to bet my life on, you know—

Justin:

If you have a bezoar and nothing, and then you get arsenic poisoning, it's probably worth a shot. But otherwise—

Sydnee:

Sure. Sure. Um, some other interesting bezoar facts. Uh, unripened persimmons have caused epidemics of bezoars before.

Justin:

In humans?

Sydnee:

Among humans. Yes.

Justin:

Wow.

Sydnee:

So you've got to be really careful, uh, apparently don't eat unripened persimmons. And there's even a name for that. It's a diospyrobezoar.

Justin:

I don't think I've ever eaten persimmon, period. So unripened persimmons are not a big risk factor for me.

Ooh. Or maybe they are because you'd have no way of knowing if they were ripe.

Justin:

I'm just saying, I don't eat them. Never seen them. Don't think it's a problem.

Sydnee:

So make sure your persimmons are ripe. Uh, another, um, kind of interesting fact, a trichobezoar is the one made of hair, can lead to something called Rapunzel syndrome. Um, which is not as, you know, enchanted as it, as it sounds.

Justin:

No.

Sydnee:

This is usually something, this is actually something I've seen before in patients who have trichotillomania.

Justin:

Meaning?

Sydnee:

Which means that they pull their hair out.

Justin:

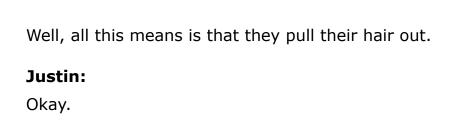
Hair?

Sydnee:

They have—

Justin:

Pull their hair?



Trichotillomania means that you pull— You obsessively pull your hair out. Now, some of those patients also eat that hair. Not all, but some do.

Justin:

Okay.

Sydnee:

And then you can get a big bezoar, a trichobezoar of hair in your stomach. And then, if it leaves, like a trail of hair that snakes all the way through the intestines from that ball of hair in the stomach, that's call Rapunzel Syndrome.

Justin:

Oh, okay.

Sydnee:

Um, and often, unfortunately, I should say, uh, a lot of these cases end up needing surgery.

Justin:

Hm.

Sydnee:

To kind of get this big blockage of indigestible material out.

Justin:

Because it can be serious.

Sydnee:

Right. And well, if it's blocking your intestines, or causing you pain and nothing can move around it, you know, it can eventually even perforate or cause a hole in the intestines, so...

| Um, you can still find bezoars sold, like, as well as fake bezoars, and animal bezoars. | |
|--|--|
| Justin: Huh. | |
| Sydnee: And all these different bezoars in some parts of the world. Again, it's like, almost like a supplement. | |
| Just a little something extra. | |
| Sydnee: Yeah. Almost in the I mean, I don't know. I've never checked, like, our local, like, health food supplement | |
| Justin: I'm betting no. | |
| Sydnee: vitamin stores. | |
| Justin: Betting, no, but possible. | |
| Sydnee: But you know, as we've discussed before, these probably work just as well as a lot of those supplement, vitamin, health food things too, so. | |

Sydnee:

Justin:

Yikes.

Hey, listen folks. PO Box 5400, West Virginia, 25706. Our 10th anniversary is just around the corner, this July 1st. So hit us up with all your bezoars you can find.

Sydnee:

[laughs].

Justin:

Please don't send bezoars.

Sydnee:

Please, please, especially don't send us homemade bezoars.

Justin:

Yeah, super don't do that.

Sydnee:

Um, you can still see them, by the way, in pieces of art from ancient times. You can find pieces of art that have bezoars in the middle of them because they were so highly prized.

Justin:

Mm-hmm.

Sydnee:

And like I said, they are a big deal when they happen in humans. Uh, sometimes you can dissolve them with soda, but other times they need surgery. So they are a pretty big deal. And of course, because I haven't said it yet, and I know everybody, there are certain people who are listening and going, "You haven't..." Harry saved Ron's life with a bezoar when he drank that poisoned mead. Don't forget that.

Justin:

Interesting. I'll never forget.

Sydnee:

Don't forget that.

Uh, thanks to the Taxpayers for letting us use their song, Medicines, as the intro and outro of our program. Um, big, exciting, cool news, uh, for us if you live in or around Washington DC or New York City.

We are coming there with My Brother, My Brother and Me, and, uh, another podcast in DC. It's Shmanners in New York and Sydnee's podcast, Still Buffering. Uh, that is gonna be June 3rd in Washington DC, June 4th at the PlayStation Theater in New York City. The DC venue is Lincoln. Lincoln Theater or Lincoln Center, something like that. Not like a center. I think like...

Sydnee:

No.

Justin:

... a hall, Lincoln Theater.

Sydnee:

Lincoln Theater.

Justin:

Lincoln Theater, I think. Um, and you can get tickets to those by going to bit.ly/mbmbam and then either nyc2016 or dc2016. So, um, those tickets will actually go on sale this Friday, at noon, EST. So don't sleep on that.

Our shows tend to sell out, um, and we would love to see you if you're in the area. So that address again, bit.ly/mbmbamnyc2016 or dc2016, depending on which show you want to get tickets to. There's probably links in our Twitter and Facebook and whatever.

Sydnee:

Yeah. Yeah. There definitely are. So please, if you can come out, it'll be really fun.

Justin:

Three podcasts, it'll be a hoot and a half. MaximumFun.org is a place for lots of other podcasts. You can go check them all totally out.

Podcasts, check 'em out.

Justin:

Check 'em out.

Sydnee:

Doesn't work as well.

Justin:

No. No. That was good. Ah, but that's gonna do it for us folks. Uh, until next Wednesday, 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]

MaximumFun.org Comedy and culture. Artist owned. Listener supported.