

Sawbones 491: Gamer Pills

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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 cohost, Justin McElroy.

Sydnee: And I'm Sydnee McElroy.

Justin: And I'm so excited, 'cause it's the MaxFunDrive! Yaaay!

Sydnee: Woohoo!

Justin: This is our final MaxFunDrive episode for Sawbones. What does that mean to you, the listener? Well, that means it's your chance to step up and say, "I love this frickin' show. I love this show, and I want to continue to support Justin and Sydnee, and help be a little part of making this show possible."

Sydnee: Mainly Sydnee.

Justin: Mainly Sydnee.

Sydnee: But also Justin.

Justin: So if you go to maximumfun.org/join, you can pledge to our network. The majority of your donation is gonna go to the shows that you say you listen to, so hopefully that includes Sawbones, because you're hearing this, so technically, it has to.

Sydnee: You do listen to it.

Justin: You listen to it. Uh, and you can pledge whatever feels comfortable for you. Y'know, how much time you spend listening to Sawbones? What do you get out of it? You decide on that amount, and we got some thank you gifts, if you're able to pledge that. For five dollars a month, if you can pledge that, Syd, they're getting over 600 hours of bonus content.

Sydnee: That's so many hours.

Justin: Behind a wall. It's all waiting for you.

Sydnee: And it's not just our show. It's all the shows, from all the years.

Justin: Yes. This year, once again, Sydnee is taking kids' medical questions with our daughter, Charlie. Everyone is loving it. The reviews are absolutely unreal.

Sydnee: Charlie is a better podcaster than both of us, somehow.

Justin: Interesting. Well, that's DNA for ya.

Sydnee: There you go. That's science.

Justin: You add two people together, you get twice as good of a podcast. That's just science. And speaking of science, Sydnee, um, scientifically, it's good for your health if you go to maximumfun.org/join. I didn't want to bid it off yet, because I felt like I hadn't talked about it enough. Because it's really, really important.

And I don't think I need to tell you folks, ads have been tough. You've probably heard a lot of Sawbones episodes that haven't had ads on them. That affects the bottom line, not just us, but the people who work with us to make the shows, and the money we use to buy equipment and stuff like that. It all comes from there, so your donations really help us to weather those storms when the ad market is rocky, as you would say.

Sydnee: And if you're already a member, thank you so much. If you're a new member, welcome; if you're upgrading, thank you, thank you. We appreciate what you do. It lets us do what we do.

Justin: Um, the science today, I'm really excited about, because I feel like it is something that touches both of our lives in a deep way. And I have really, I think, stepped up to the plate here on the research end, because I have brought you so much flippin' information that it's basically unreal.

Sydnee: Uh, I'm really excited to see what you have for us today, Justin.

Justin: Well that's good for you, Sydnee, 'cause today we're talkin' about gamer pills.

Sydnee: ... Gamer pills?

Justin: Yes, that, uh, that is the term that I am using to describe any sort of, uh, substance that is supposed to medically improve your gaming acumen.

Sydnee: Medically improve.

Justin: Medically, substantively improve your gaming abilities through, I guess, pharmacological means. Pharmacological solutions. Well, because there's other— okay, I'm having to be specific here, because there is this world of pro gaming. There is a lot of like... there is a very real, actual problem with people in pro gaming and their, uh, abilities decreasing over time, and the repeated stress injuries that a lot of them are experiencing that are no laughing matter. Like, put them out of the game early. Not the literal game, and the... y'know, figurative game.

Sydnee: Sure. Similar to athletics.

Justin: Yes. And so, there are a lot of preventative measures that people in that community are talking about to increase the longevity of players, um, physical therapy. That kind of thing. So, I'm not talking about that.

Sydnee: That's not what this is.

Justin: That's not what this is. These are pills to help you game better, folks. And that is what we're gonna talk about today.

Sydnee: And we're not just talking about Adderall that maybe you aren't supposed to take, but do.

Justin: Right. Yeah, nothing illegal here. This is all stuff that's just available on the market, just fine.

Sydnee: Adderall is not illegal, I should say. It is a prescription drug that is legal when it is being prescribed to you by a healthcare professional.

Justin: Now, it's worth also noting, I don't know this for certain, because it's not my space. I believe some of the stimulants discussed here are banned from use in, uh, like a professional e-gaming, some of the caffeine, I think.

Sydnee: Really?

Justin: I think there's some rules, but I'm not positive. I shouldn't say— I know there's some doping restrictions in pro gaming, but I don't know what they are.

Sydnee: I would assume that there would be testing for like, amphetamines and such, just because of their effect on like, reaction time and cognitive ability and focus, and...

Justin: There's a lot of overlap with the ingredients in a lot of these, so I'm just gonna go through, brand-wise, and just bring it to you that way. Because I feel like I don't want to get in the way of the marketing. And I feel like if I, y'know, bring too much of myself here, I'm gonna be impeaching on it.

And first up, I want to tell you— and Syd, if you feel the need to weigh in with any sorts of like, scientific contributions...

Sydnee: Oh, I will.

Justin: Okay. So, first up is Genius Gamer. Uh, this is the first one that popped up in my searches here. These are in no particular order, just some of the ones that I found that seem to be the most popular. "Genius Gamer is an elite gaming performance supplement." And it is a "scientifically researched formulation for serious Gamers," capital G. Uh, and here's what this one has in it. "Teacrine, Dynamine, and Cognizin," which all have either the... what do you say? The copyright or the trademark after it, so these are proprietary, I'm assuming.

Sydnee: They are. When you look at the studies on these, these are all like... they've all got their little R on them in the studies. Which you don't see quite as often, honestly. [laughs] As someone who reads a lot of studies, you don't see that a lot.

Justin: Um, so, from what I could tell, the ingredients in Genius Gamer, behind their like, proprietary information here, all seem to be, basically, uh... a couple of them, at least, seem to be forms of caffeine.

Sydnee: Mm-hmm.

Justin: That's a real popular theme in all of these supplements, is the caffeine portion is pretty ubiquitous in a lot of these stimulants.

Sydnee: Yeah.

Justin: Now, Syd, I have given you access to my research, so you can sort through my data that I have gathered.

Sydnee: Your data.

Justin: My data, yes. My data suggests that Teacrine and theacrine are similar. I found a Reddit post on it that seemed very scientific, but I could not understand it. But it seemed extremely scientific, the words in the Reddit post. So that's one of the big ones in Genius Gamer.

Sydnee: Right. I mean, I think this seems mainly like a bunch of caffeine or caffeine-like things. Do they make any claims as to why... 'cause supposedly, this is supposed to prevent the jitters and the crash.

Justin: Yes, of caffeine.

Sydnee: Right.

Justin: Right.

Sydnee: Do they tell you why any of this would... because if something is caffeine or caffeine, like, analogous, and you take enough of it..

Justin: We're getting into a little bit of pharmacology, in which I am not an expert.

Sydnee: I just wondered if they tried to explain why it would not make you jittery.

Justin: No. Okay, so this is the problem with a lot of these... we're having some fun here with the bit. I want you to understand that I've been doing this show for a long time, so I'm not... y'know, I get it, right? This is all kind of made up, and I don't want to pretend like I'm selling you crap.

The problem with a lot of these supplements is that it includes these ingredients, but it doesn't necessarily— the benefit is assumed. Like, they're not saying— this company, or any other company, is not saying, "These ingredients, and let us explain them to you." It's saying, "We've got these things. You know about these things, right? They're these brand names that we made up, but you know about them. It's got all of them in it. And you'll have to do a little hunting yourself to find out why they are good, and to what extent they are."

Sydnee: Well, as I was digging in when you first told me what you were looking into, and I was kind of digging into some of these studies and starting to look into some of it, there seems to be a lot of understanding among a certain... and I mean, this isn't even necessarily the gaming community, I would say.

Justin: No.

Sydnee: There's a lot of overlap with like, people who are looking for workout performance boosters.

Justin: A hundred percent, yeah.

Sydnee: And other, like, athletic or like muscle-building type pursuits.

Justin: You might say bio-hackers, as an umbrella term.

Sydnee: You know how I feel about that...

Justin: Yeah, I know. You don't like people cuttin' in on your business.

Sydnee: [laughs]

Justin: Don't like us taking matters into our own hands.

Sydnee: No, it's not— y'know what? I could say something really Eeyore-like at that moment, like... I don't know. There's only so much of this we can troll, folks. Only so much.

Justin: I also wanted to mention, um, Genius Gamer also includes, uh, what is it called... they call it lutein. They have a trademark version of... lutein [lu-tee-in]? Is that how you pronounce that?

Sydnee: Lutein [loo-teen].

Justin: Lutein. Okay. Lutein, and this is their trademarked version, which they call Lutemax. And these are really... these are in a lot of these, too. These versions of lutein, which I believe is a derivative of marigold extract, that is supposed to help... this is with blue light, like, eye strain, and blue light... uh...

Sydnee: And I think we'll probably return to this theme several times, but the problem with something like that is... okay. This is very similar, and this

may be something that you have thought yourself, so maybe this will be helpful for you. I will often be asked about B-12. Should I get a B-12 injection for energy? This is a very common question. A lot of people with varying levels of health literacy or whatever will ask this question.

So, if you, yourself, have asked or are thinking about this question, don't be embarrassed. I get this question very frequently. And the thing is, if you've got plenty of B-12, if your B-12 level, if I could like, look at, like, x-ray vision and check it right now... if it's normal, if it's within the physiological range, giving you more B-12 won't help. Does that make sense?

Justin: Yes.

Sydnee: If it's low, sure. But more is not always more in the human body. At best, more is the same. And at worst, more is toxic and will kill you. So like, for a lot of these, I would bet you don't need more lutein than you're getting in a lot of, like... some of these things, you just don't need much of. Either your body makes it, or you get it from a pretty standard diet.

Justin: This is something that I've noticed, looking into some of this research. When you see people pointing to studies confirming the efficacy of it, they're pointing to studies in people that were deficient in it, and saw an improvement.

Sydnee: Yes.

Justin: Like, they were deficient in it and saw an improvement, and they're like, "See, it works." And it's like, well, okay, but... [laughs] It worked in them, but like, is it gonna make me better than normal?

Sydnee: Exactly. It won't take you— like, there's a limit. There's a limit as to how good it gets, and then it doesn't help more. And like, you can find lutein in egg yolks, spinach, kale, corn, orange pepper, kiwi, grapes, zucchini, squash... these are just a few of the places. Just a quick search. A wide variety of foods contain it. So you're probably, if you're eating kind of a regular diet...

Justin: And I am.

Sydnee: You're probably gonna encounter plenty of that.

Justin: Okay, fine. But is that gonna be the same about Forebrain Pro Gamer? That is my question to you, Syd. Forebrain Pro Gamer from Force Factor.

Sydnee: It's just for your forebrain?

Justin: No ma'am. This is about winning. It includes potent, scientifically studied compounds to help you play better and win more, period. This one is in 80 capsules. Now, this one, Forebrain Pro Gamer, it'll improve my reaction time, it'll protect my eyes from the blue light.

Sydnee: Okay. So it's got the lutein.

Justin: I bet that's lutein as well. Uh, yeah, FloraGLO lutein. Their special kind of lutein. Uh, Lutamax, I believe, is the—[laughs] Okay. It's all lutein. And it has NooLVL. Now, that is spelled in the most irritating way you can imagine. Capital N, O-O, capital L-V-L. NooLVL. NooLVL. Which is arginine silicate.

Now, I am not a smart man, Sydnee. But in looking at some of the research that I could find, this is the only one— not the only one, but one of the things that seemed like maybe there might be some benefit to someone that has been scientifically proven. But again, I don't know.

Sydnee: Arginine?

Justin: Arginine is definitely one of the ones you will see repeated the most in these. Arginine, or NooLVL for the branding awareness.

Sydnee: Arginine... okay, this really took me down a rabbit hole, because arginine is its own little supplement industry unto itself.

Justin: Okay.

Sydnee: And specifically, you'll see a lot of these will say L-arginine or L-whatever. There's another one.

Justin: Yeah, there's a lot of them.

Sydnee: Yeah. Well, I mean, yes. There's a lot— theanine. That was the other one. There's several that we talk about. But uh, what they're talking about is, these are amino acids, and as they're being formed chemically, there's like a left-hand form and a right-hand form of all of them. Like, when a chemical reaction happens, it might create enantiomers. So like, chemically identical structures that are mirror images of one another.

Justin: Okay.

Sydnee: Okay? An L one and a D one.

Justin: Okay.

Sydnee: Okay? Generally, with different chemical compounds, one form is the active one that actually does stuff, and the other is just the mirror image byproduct that happens also.

Justin: Is it always L or always D?

Sydnee: Not always. Generally, L is the one, but not always.

Justin: Is the one that works, or no?

Sydnee: In these amino acids, we got a lot of L ones that we care about. But yes, they're just mirror images. So if you see an L or a D, they're just telling you, it's this enantiomer. It's this mirror image of this molecule. I don't know why you would need to know that, but now you know it.

Justin: Yeah, it's in there, huh? Can't really say that I knew that.

Sydnee: That is what that means. So arginine is huge in the like, pre-workout...

Justin: Yes, that is a big part of that. And I saw a lot of people billing some of these as like, double duty. This is great for your pre-workout, good for the pump. [laughs]

Sydnee: Yeah, I saw a lot about pump enhancement. And pump improvement.

Justin: [laughing] There's a lot about improving your pump.

Sydnee: There's a lot about pumping when you read about arginine. [laughs] Man, I've just destroyed all of my socials.

Justin: Oh, forget it, bud. My algorithm is beyond repair at this point. [laughs] It already knew I was a gamer, so this just seems like, "Well, he's getting up in years. This seems like a perfectly natural path for his algorithm to take."

Sydnee: Mine is just gonna be like, pecs, pecs, pecs.

Justin: [laughing] Get swole, Syd.

Sydnee: Uh, so, what they've researched, arginine... so, arginine is used in the synthesis of nitric oxide.

Justin: Okay.

Sydnee: Nitric oxide is something in your body that dilates blood vessels, opens up blood vessels. So blood flow goes somewhere a little faster. You have it in your body. You get arginine from your body— like, you make it.

Justin: Nice.

Sydnee: And then, also, from foods.

Justin: I should be selling it. There's a market.

Sydnee: You have lots of it. And then, arginine is part of the process that makes NO. We know that like, having enough of this in your body is

important. We also know that, probably, most of you listening do, just, naturally from making it and from eating it.

First of all, the very concept that taking an arginine supplement can increase the NO levels in your body... that very concept is still being debated.

Justin: Okay.

Sydnee: Because, again, it's just maxing out what... it's not a limitless pill.

Justin: Dang it!

Sydnee: There is a limit, and once you have enough, there is an enzyme that turns arginine into nitric oxide. I'm making this very simplistic. Once you have fully saturated all the enzymes, they've got all the arginine, you can't make anymore. Like, y'know what I mean? That's it. That's it, you're done. There's no more you can make.

And so, what they're saying is, you get to a limit where more arginine doesn't make more nitric oxide. And so, there's some studies that suggest, taking any of these supplements isn't doing anything, because it can't do the thing it says to do.

Now, there is conflicting evidence that says, "No no no, we did some studies and we did find evidence that, if you draw your blood after taking this supplement, you do find increased levels of nitric oxide." But I'm just saying like, the core way this would work is still being debated.

Justin: Yes, but you cannot debate that many people have reported increased levels of pump.

Sydnee: No, I can debate that. Because a lot of it [laughs] is just people who take these supplements and then say that it works. And then, when you look, there are studies. The studies, the one that you sent me, Acute Inositol Stabilized Arginine Silicate Improves Cognitive Outcomes in Healthy Adults. Um...

Justin: I mean, just you saying that sounds so reassuring to me.

Sydnee: Do you know how many healthy adults were in this study?

Justin: How could I know that?

Sydnee: 19.

Justin: That's not many.

Sydnee: No. They did the study on 19 adults.

Justin: That's so few, to hear you say it like that.

Sydnee: And so, there was— they gave them either the placebo, or the arginine silicon... and this is because the silicate supposedly increases the availability of the arginine, so that's why this— a lot of these supplements will try to do this: "We're not gonna answer the question as to whether or not arginine works. We're gonna answer the question, which form of arginine is most bioavailable? Meaning, which one actually gets into your body the best?"

Justin: Right.

Sydnee: So they've reframed the question. If you take it back to, "But, does arginine do this?" Nobody wants to say that, because they don't know.

Justin: Right.

Sydnee: There have been some very small studies that have suggested that maybe you do a little better on a memory test here and there if you take arginine. But this is not widely accepted. This is not common medical knowledge by any stretch.

Justin: Well, honey... okay, I don't want to be rude, but of course it's not *common* medical knowledge. I'm trying to get the frigging edge. If every 12-year-old with a PayPal account knows about it, then they're gonna have me beat! I need to use my advantages! Y'know what I mean?

Sydnee: I hope there are not 12-year-olds buying these gaming supplements online.

Justin: They should be 13. And that— I'll insist on 13.

Sydnee: And I will say this. If it does, in fact, increase nitric oxide, this is also something to be cautious about, because there are other medications that might, uh, conflict with, that you might have problems if you take this. There are a number of conditions that they don't recommend this for. Its effect on blood pressure is still unknown.

Justin: Alright, alright, okay... listen. Sorry, folks. She swore she wouldn't do this. I'm trying to talk to my gamers. [laughs] Y'know what? I'm gonna take a quick break here to reset, okay, Sydnee?

Sydnee: Alright, alright.

Justin: Because you're getting a little in the weeds with all this facts and science, and I'm just trying to educate the gamers. We, the gamers.

Sydnee: Well, let's go to the billing department.

Justin: No, not this time, Syd. Because this time, we're gonna talk about the Maximum Fun Drive.

Sydnee: That's true.

Justin: This is our— it's in the final days right now. In fact, as you're listening to it, it is either the final day, or the next-to final day. But we are really hoping that you will be able to pledge to this show and the network at a level of... let's talk about five dollars a month. You do five dollars a month, that's gonna get you a lot of bonus content, right Syd?

Sydnee: Over 600 hours of bonus shows from all the shows on our network. Every year, we've been doing this. They're great, they're hilarious, they're weird, and only you get to know about them if you are a member at five dollars a month.

Justin: If you can do ten dollars a month... wow, that's nice. But if you can do ten dollars, we are going to, you'll get the bonus content, but we're also gonna send you an enamel pin that is going to be from one of your favorite shows. You get to pick. Whatever Max Fun show you like. We, y'know, we know. We get it. No more will be said.

Sydnee: [whispers] It's us.

Justin: It's us, we know. But uh, you are gonna be able to pick a pin, and all the uh, the bonus content. At 20 dollars a month... wow. That is so kind. Thank you so much. At 20 dollars a month, we have a beautiful hat with the Maximum Fun logo on it, which is beautiful.

Sydnee: It's a bucket hat.

Justin: Yeah, it's a bucket hat. Love that. If you don't want to go the hat route, there's a gaming on the go pack that's like a bandana that doubles as a chess board, and also a checker board and the game pieces, so you can take it with you on the go.

Sydnee: It's so cute.

Justin: It's so cute. But the thank you gifts are a nice way of saying, y'know, thank you. But the main thing is using that money to support the shows that you love. Um, that is the only way we're able to make any of these podcasts, is because it is our job to do it, and you all have made that possible. Um, you support this work, and also our family, and uh, everything that we do, you make it possible for this to be our lives, and we are always so incredibly grateful for that.

Sydnee: Yes. We can't say thank you enough. If you're a member, if you've already joined, if you upgraded your membership, thank you, thank you, thank you. Really, we count on you, and we are so grateful.

Justin: And we know that, y'know, not everybody can do the five dollars a month, and that is, y'know... we completely understand. It is a tough time for a lot of folks. If you are not able to do that, um, perhaps maybe sharing

the link around, asking others to support the network is super helpful. But regardless, y'know, I'm just happy you're here, frankly.

Sydnee: Me too.

Justin: Y'know, if you can afford to give, that's great. You can head over to maximumfun.org/join to do exactly that. And if you can, it would really mean a lot to us, and we are so grateful to all of you that are supporting the show and helping make it possible for us to make this our jobs. So, thank you for being a big part of that work. Thank you. Thanks.

Sydnee: Thanks.

Justin: Thanks. Syd... these pills and stuff are nice. But what if you wanna get good? [snorts]

Sydnee: Justin, a lot of these other— the names—

Justin: 'Git gud' is spelled G-I—

Sydnee: Like, NoolVL and VegiSURGE and FloraGLO...

Justin: Oh, listen. Okay, I'm gonna come back to git gud, but VegiSURGE... that...

Sydnee: Is caffeine.

Justin: That's caffeine. [laughs] And they don't even try to hide it.

Sydnee: No, it's just caffeine.

Justin: This is still in Forebrain Pro Gamer. "VegiSURGE is a premium green coffee bean extract—"

Sydnee: Does it have any vegetables in it?

Justin: It says— listen. “VegiSURGE is a premium green coffee bean extract, conferring 150MG of extremely high-quality natural caffeine, which is a better source of longer-lasting energy,” Syd.

Sydnee: Than what?

Justin: I don't know, it doesn't say, but it's better than whatever you're thinking about. Uh, that is another big part of Forebrain Pro Gamer, VegiSURGE.

Sydnee: But does it have any vegetables in it?

Justin: Well... coffee's a vegetable, Syd.

Sydnee: No, does it— no, but really, it's called VegiSURGE. It doesn't even have— 'cause sometimes, they'll like, throw some, y'know, some vegetable things, as if you wouldn't figure out like, you could also eat vegetables.

Justin: But it does help with a lot of the things that caffeine is helpful with. I mean, you gotta agree with that. [laughs]

Sydnee: What does it have in it? No, it's just caffeine?

Justin: We love caffeine, and we know that it is effective. You're not gonna sit here and tell me caffeine doesn't work, Syd.

Sydnee: VegiSURGE? I just can't believe they wouldn't fake it with like, putting some vegetable things in there. Okay. Anyway, does the name GitGud not offend you on some level, like, as a gamer?

Justin: Okay.

Sydnee: Does it feel like you're being talked down to?

Justin: It's— okay. So, let me—

Sydnee: You need to spell it.

Justin: Capital G,I,T, capital G,U,D. All intercapital, I guess you would say, in one word. GitGud.

Sydnee: If I was being marketed to as a demographic with that, that would offend me. Do you think I'm gonna fall for like, GitGud?

Justin: GitGud. Here's what I will say. First of all, just the nomenclature of gamers, period, is kind of silly. I feel like most people who play video games don't necessarily— I mean, we don't think about movie watchers, y'know? We don't think about music listeners.

Sydnee: Well, I guess we call people readers. Like, there are people who read a lot, and they're like, bookworms.

Justin: It's a nicer way of saying nerds.

Sydnee: Okay.

Justin: Uh, so, but...

Sydnee: You're right. Tell me about GitGud gaming inhaler.

Justin: No, that also means nerd. So what I'm saying is that, it is not weird for people to try to cash in on people who play video games as a demographic by marketing to them. I mean, it has been going on for years. I mean, when I was covering video games, it was stuff like, um, Gamer Grub, which was, uh—

Sydnee: I remember that.

Justin: A snack made for gamers, that was designed to not leave a lot of stuff on your hands. [laughs] So it wouldn't interrupt your gaming sessions. And it also tasted pretty good. I liked Gamer Grub, I don't care. But y'know, we had Gamer Fuel. Game Fuel was the Mountain Dew derivative. There's game chairs, there's been game— game everything that is supposed to, y'know, enhance. And all the marketing is always tragic. It's always been like that.

Sydnee: Oh my gosh, look at these things.

Justin: What are you talking— what are you looking at?

Sydnee: I'm looking at the GitGud inhalers.

Justin: Okay, so what is it, Syd? Let's reveal. Let's re— can you just read, Syd? Okay. In the description... okay. Are you looking at their webpage?

Sydnee: Yes.

Justin: Under where it says 'add to cart,' below that, can you read that subhead in the paragraph below, please?

Sydnee: Do you mean "feel the power of peppermint"?

Justin: [bursts into laughter]

Sydnee: Who says— okay. This first statement, I need a ref—

Justin: Don't editorialize, please.

Sydnee: Okay. "For decades, professional athletes have used peppermint as a secret weapon to accomplish their goals. And now you can, too. Our proprietary blend of energy inhalers are formulated with a potent blend of peppermint and other natural ingredients to help you feel alert, focused, and invigorated. Experience a refreshing minty blast that will take your experience to the next level." So you stick this thing in your nose and just inhale?

Justin: Yeah. I mean, yeah. What's unclear?

Sydnee: Well, there's the peppermint, but there's also... well, we got here... oh, that's winner mint. Not winter. Winner. Tryhard tropical, cinna-run-and-gun...

Justin: The shooty fruity. Don't forget about shooty fruity.

Sydnee: And banana royale. Oh my gosh, I can't. Demon berry?

Justin: These are uh, basically, I think the— I can't even find them, like... I can't even find them saying the things that are in it that are supposed to help you. [laughing] It is literally just like, I don't know, it probably smells like peppermint.

Sydnee: That's what I'm trying to find out, what the ingredients are.

Justin: There's no— I mean, you can keep looking if you want. I couldn't find anything. It is literally just like—

Sydnee: Scent.

Justin: Scents. Yeah, just proprietary scents that are in it.

Sydnee: They're just scent.

Justin: So like, it's just aromatherapy. I mean, it's just aromatherapy, is all that is.

Sydnee: Okay. [sighs]

Justin: But anyway, GitGud, spelled just like that, is there. Now, Focus Factor Gaming Nootropic is fascinating. 'Cause it is— it was designed with, um... it is a drink additive, fruit punch flavor, it looks like this one is. Uh, yeah. And so, it is designed with uh, we, the gamers, in mind, and our performance, specifically.

So this nootropic— can we talk about nootropic for a second? Because I've been batting around that word for a little bit, and in my layman's understanding, as somebody who has spent a literal entire afternoon researching this, nootropic is a... something that is designed, or supposedly will improve cognitive function through chemical means. Like, it is something that will improve cognitive function through chemical means. Is that basically—

Sydnee: Yeah, that's— yeah. Smart drugs.

Justin: Smart drugs. Brain pills.

Sydnee: Brain pills. Well, brain pill— there are lots of pills that work on the brain.

Justin: Well, very good point, and not all of these are pills.

Sydnee: No, and these are things that are— they're like cognitive enhancers, I mean, would be the way to think of it.

Justin: So it's got— it lists some of their nootropics that— caffeine is a nootropic.

Sydnee: Mm-hmm.

Justin: I mean, for example. Gingko biloba extract, uh, and lion's mane for the adult e-sports athlete. Now, I got— hold on one second. Can you tell them about, uh— do you know anything about gingko biloba? I know that that was a— I feel like I don't hear gingko biloba as much anymore, but I feel like that was a real— it had a real moment.

Sydnee: It was. It was a big, like, supplement that people were taking for memory benefits for a while. Just like, I'm gonna improve my brain. I'm gonna take some gingko biloba. I think, y'know, it's so hard, 'cause when you get into a lot of these supplements, I'm kind of gonna sound like a broken record, which is, there generally are no or few studies, and the studies are not what we have come to accept as like, the gold standard for, does a drug work or not.

Justin: So I mentioned lion's mane and gingko biloba because those are a couple of the ones that I— see, I got these.

Sydnee: When did you buy these?

Justin: So I got these at the CVS.

Sydnee: When did you do— you got lutein!

Justin: So here's the thing. I got them at the CVS, because we were gonna stream Celeste today. It's a really hard game, and me and my brothers and I were all supposed to play it together. And everybody said that it was gonna be way too hard for us. But... and if you watch the stream, folks, you'll see this is true. We did amazingly well.

So, I took a cocktail. I couldn't buy these things, 'cause they weren't at the CVS, none of these. I got to the active ingredients, just to see how they would improve my performance, and there is documented evidence. You can go through and see how I performed before I took them, after, y'know, all of them. So...

Sydnee: Did we compare it to other gaming sessions, or..

Justin: That's so interesting, Syd. What an interesting question.

Sydnee: And also, are we saying that you are enough of a subject? Like, we can just test something in you, and if it works, we can generalize that to the rest of the human race?

Justin: Well, yes and no. Now, uh, lion's mane... is that mushrooms? That's what it says on the box.

Sydnee: Yeah, lion's mane comes from mushrooms.

Justin: Yeah. Um, there's five calories in each of these pills, which is wild. Or each two of these pills. It's known as the smart mushroom, so lion's mane must be well, uh, well-documented for its improvement for everything. I did want to bring a layman's perspective to Focus Factor Gaming Nootropic. Does not have a lot of reviews, but it did have one on Amazon. Well, it had two total.

And one was a one-star review that said, "Changed the smell of my stool. Maybe it's a coincidence, but I think it changed the smell of my stool. My stool started to smell odd around the same time I started using this." So that is one layman's, uh, review of that.

It also contains lutein, is also in Focus Factor Gaming Nootropic.

Sydnee: Well, it's interesting, because a lot of these things, and I think that some of the... not ginkgo biloba or lion's mane here, but a lot of the like, supplement complexes that have multiple things in them, they warn about GI side effects. Like, I found that listed just like, as I was starting to look through these. This might cause diarrhea or constipation or bloating or cramping or something to happen to your GI tract.

Justin: Right. So, it might change the smell of your stool, possibly.

Sydnee: It's possible. That is, I guess, a known accepted side effect of like, arginine, for instance.

Justin: This person also doesn't say 'for the worse.' To be clear, they just say it changed it, and it smelled odd. So, I don't know, it may be an improvement. They don't make that clear. But on a one-star review...

Sydnee: It would almost have to be, though, right?

Justin: One-star review does imply it was a change for the negative. So, those are the big ones in Focus Factor Gaming Nootropic. Um, so, what they say here is, it also features Lutemax 2020 for mental sharpness, stress support, and to provide blue light protection for those long gaming days. That's lutein, again, as a reminder. So go ahead and get ready for game day with Focus Factor Gaming Nootropic. It's a fruit punch powder packet, is what that is.

Sydnee: Oh.

Justin: It's got ginkgo biloba, lutein, lion's mane, and those are the big ones. Oh, it's got caffeine anhydrous, which I will tell you, several people mentioned having caffeine anhydrous, which I found out, means caffeine that doesn't have water in it. [laughs]

Sydnee: Yeah, I was gonna say. That just means no water.

Justin: [laughing] I think they just add it on there to make it seem like, different from caffeine that is in soda.

Sydnee: No, that's just—

Justin: No, I know. You don't have to clarify for me. I'm saying I think that's why they do it.

Sydnee: Okay. Okay.

Justin: Um, and that changes... now, MADMONQ. This one has a lot of stuff in it. Uh, you wouldn't even believe. Siberian ginseng, which isn't ginseng, I found out. So, don't confuse the two. I don't know why you would call it Siberian ginseng, but it's not ginseng, as far as I understand it.

Uh, these are... looks like pills? I don't know if they're chewable or not, but... I guess every pill is chewable if you believe in yourself.

Sydnee: [laughs]

Justin: This version 3.0 of MADMONQ comes with a patented brain berry, which is a potent natural extract tested on gamers to improve focus, psychomotor speed, and accuracy by syncing brain, eye, and hand processes.

Sydnee: Okay...

Justin: So, brainberry is... it is an all-natural aronia berry ingredient, standardized for high levels of Cyanidin-3-O-galactoside.

Sydnee: Glucoside, yeah.

Justin: Glucoside, yeah, which is clinically validated to improve focus and psychomotor skills.

Sydnee: It is?

Justin: Clinically validated.

Sydnee: Because I am, right now, trying to find where...

Justin: Well, I'll tell you what. You look into brainberry a little bit, I'm gonna tell the people more about MADMONQ. Because it is perhaps best known on the internet, because it was endorsed for quite some time by a streamer and pro gamer, uh, who went by the handle of Forsen, or still does. He's no longer associated with the company, as far as I could find. But that is— Forsen is responsible for a lot of, um, just really great internet humor.

And they had, uh— he had as the, uh, let's see here... what his position was, MADMONQ's chief questionable humor officer. So uh, he joined with the company, and it said here, uh, "We chose him because we believe that his skills, endurance, talents, experience, and 140 MENSA-certified IQ will have a real impact on our project."

Sydnee: Oh.

Justin: And I think Forsen does a lot of like, um, bloop... poop humor, where it's just sort of, uh... y'know how a lot of the internet has replaced humor with just sort of like, very deep intercultural references? So, the deeper the reference, and the less accessible it is, that's the sort of version of humor. So, uh, the sort of abstract nature of it is part of the gag. It's not supposed to be funny, as I understand it.

Sydnee: It's not supposed to be funny. Man, I feel like—

Justin: That is not a judgment on Mr. Forsen himself. I don't know about it, but that is what I know about that kind of meme.

Sydnee: I feel like I've had that explained to me by men in many moments of my life. "It's not supposed to be funny!"

Justin: No, no, no. It's also not. [laughs] Sorry.

Sydnee: I am desperately trying to find Cyanidin-3-O-glucoside...

Justin: You still haven't found all the clinical proof?!

Sydnee: I mean, what I keep finding are articles where they're like, "It's been proposed for several bioactivities, like anti-inflammatory and anti-microbial and epigenetic." But then it's like, do we have studies? And they're like, "No, no, we don't have studies. But it's been proposed!"

Justin: I have found— I think you're maybe not looking in the right spot, because I have found that whenever I have a bias that I would like confirmed, it is usually very easy for me to find something on the internet that will do exactly that. Um, so—

Sydnee: Uh-huh. See, I am trying to find it desperately, and everything is... um, I mean, man. It's really well-written scientific nonsense. It's really dense, and so a lot of people would— if you don't read in too deeply, would think like, "Oh, well, it must do these things." But I am not finding that it has been proven to do anything, honey.

Justin: Um, well, I guess you're just wrong. Um—

Sydnee: Here's, "As a potent modulator of NRF2 mediated oxidative stress." So maybe it does that.

Justin: I bet you that modulation in the stress, that sounds like it could be about gaming, for sure. Uh, there's—

Sydnee: They're saying, eat a lot of berries to prevent disease, is what this study is telling me.

Justin: But I don't have the berries, I only had MADMONQ 3.0!

Sydnee: But it's got the special berry. Brainberry.

Justin: Brainberry. Which also has a celebrated special ingredient, um, that's uh... caffeine. [laughs] It's got a lot of caffeine in it. It's got a good amount of caffeine in it.

Sydnee: Well, and I mean, some of these, the less sophisticated ones are just gonna be caffeine, I think.

Justin: Well, yes. A lot of the people who... it's funny to watch these people market against each other, because the majority of the marketing is, "The other guys are just selling you caffeine pills with fruit flavor! Not us! We've got L-criolitine!" It's like, well, I don't know what that is. Is that— "We got Brainberries!" It's like, I don't know about that. Nothing's been explained to me.

Sydnee: Well, and when you try to look up studies, there are all these things that say, it's been proposed that this could do this. And it's been suggested, and it has been inferred, and...

Justin: See, when I see a PubMed page, I just figure I found the evidence I need. If it looks like PubMed, then I know it's scientific research, and I am done.

Sydnee: You cannot assume that just because it's on PubMed, it is a good study.

Justin: Okay, well.

Sydnee: You gotta read it, you gotta see where it was published, you gotta see was it peer reviewed, you gotta see what was the... what was the power of the study, what was the design of the study...

Justin: They're all extremely powerful.

Sydnee: No. No.

Justin: Any study is very powerful, I think.

Sydnee: And then you gotta look for bias and conflicts of interest in the—

Justin: Did you have a chance to look into my work on Spectra? Uh, I've been doing some preliminary research, which is linking you to another article

on PubMed. [laughs] That's right, this is from the National Library of Medicine. And PubMed. Yeah, it is from PubMed. So, um...

Sydnee: And see, this is tricky, too, because it's from an open access journal, which, we've talked about this before on the show. It's like, really cool, the idea of like, we're not gonna wall our— we're not gonna put our journals in a locked garden. We're gonna let everybody put their stuff here and read each other's stuff, and it's gonna be this open sharing of scientific information. But you can lose some rigor sometimes in that process. I'm just suggesting that you always do. There are certainly ways that we could share these studies more widely. But you also have to dig deeper. You can't assume anything.

Justin: Um, well, hopefully the work that I've send you on Spectra... that is another ingredient in MADMONQ, which is just loaded down. It's got brahmi, which is, uh... it's also known as herb of grace. It's a big part of ayurvedic medicine. And it's got brahmi, and it grows in wet, tropical environments, and it's been used in ayurvedic medical practices for centuries for a variety of purposes, including improving memory, reducing anxiety, and treating epilepsy. So, that is extremely compelling.

Sydnee: This doesn't look like they actually looked for.. they were looking for things they could measure in the blood. This doesn't actually.. "For the first time, we've measured synergetic, biological effects of a natural supplement on changes in OSM and cellular metabolic activity. The unique design and activity of the plant-based natural supplement..." This is... This is even written in a way that I don't...

Justin: [laughs] So, also, it's got rhodiola, which is an herb that grows in cold mountainous regions. Okay. Y'know what, Sydnee?

Sydnee: There's 22 people in this study you sent me.

Justin: [laughs] Okay, listen!

Sydnee: [laughs] They also are using, like... hold on. Hold on.

Justin: I have so much—

Sydnee: Is this from the makers of Spectra?

Justin: It's impossible to say. But I did want to tell you real quick, Syd...

Sydnee: Mm-hmm.

Justin: Uh, real quick, one more... y'know what we're gonna do? Here's what we're gonna have to do, Syd. I don't know if it'll be next week, or at some point, but I'm gonna let you have my research for longer, and maybe you can go through and we can do an episode talking about some of my research. And so, we could try to maybe examine and see even more, to give people better understanding.

Sydnee: I think that would—

Justin: Not just specific— not into the specific ingredients or things, but maybe as a way of like, doing this research for yourself, synthesizing it, and understanding it a little better. I could show you the research that I did, and we can— maybe you can go over it, and next week, or at some point after, you could talk to me about this research from your perspective. How's that? 'Cause I've been making you do this on the fly, and that's not fair, 'cause I'm loaded down. I'm loaded to bear with all kinds of great information.

Sydnee: No, and I would love to cross-reference some of this stuff, and then, try to figure out what exactly... there's so many references where they're assuming, like, we know that this does this. We already know, like, this is an antioxidant, and that this supports cardiovascular health, and that this changes lipid profiles. And if you click on the link that they're saying we already know, I followed one of those links to a textbook chapter on like, just basic human physiology, and it did not, at all, prove... like, that reference did not prove the statement in the study. But you wouldn't know that. It was just a textbook chapter.

Justin: Okay, since I know that we are not— you're not gonna talk about the science anymore, I have just— we're gonna return to this topic at a later time. I did want to tell you real quick about Gorilla Mind Respawn, which enhances crucial gaming skills such as accuracy, psychomotor vigilance,

rapid decision making, map awareness, multitasking, working memory, communication and the reduction of overall errors. [takes a deep breath] Here is a quote, and only people who play video games will enjoy this quote very much, but I did want to tell you all that it helps— this is a quote from their webpage.

Sydnee: Uh-huh.

Justin: “Helps me focus on CoD. I was having low-KD issues. With this supplement, my KD is through the roof.”

Sydnee: What is that? What’s that?

Justin: [laughing] It’s a— [laughing]

Sydnee: I don't know what that means.

Justin: It’s your—[laughing] It’s your kill-death ratio. [laughing uncontrollably] It’s your ratio of how many people you’ve killed to how many people— how many times you've died. So, if you're playing in a game, and your KD ratio is bad, that means you died a lot more times than you killed other people, right?

Sydnee: Okay. Okay.

Justin: So a low KD is bringing down your whole team. But the way they phrased it, to summon up ED, to me, or low T, I think is amazing. And also, CoD is Call of Duty, right? So, the quote is wild. And it’s not attributed to anybody, so I'm guessing they just wrote it, but...

Sydnee: They just wrote it, yeah. Um, also, is this the same formula... so you've sent me some ingredients in this. And Gorilla Mind Respawn, is this the same that contains uridine monophosphate?

Justin: Yes.

Sydnee: Which you have linked me to...

Justin: Now, see, the other thing I linked you to may be wild. It's something else I found on Reddit. I don't know if this is right, either. 'Cause the study I found said that pharmacological versions of uridine monophosphate may be cancer-causing. So, I don't know what to do, Sydnee.

Sydnee: Well, I'm gonna have to... I'm gonna have to read— I'm gonna have to look into that. I would say— here's what I would say in the meantime. Unless you're just trying to take caffeine in a weird way...

Justin: [laughing]

Sydnee: Which I wouldn't recommend either, because like, this one has 300mg of caffeine in it. That's a lot of caffeine, guys.

Justin: That's a lot of caffeine.

Sydnee: That's a lot of caffeine. So, what I would recommend is maybe don't take any of these.

Justin: Okay, but listen, Syd. Listen.

Sydnee: No, don't just— just— aren't they supposed to be for fun?

Justin: Yeah, but you gotta get the gamer's edge. I mean, that's so important. And the work we do here on Sawbones is important, Syd. And that's exactly why we're asking people for their support in the MaxFunDrive. Sydnee can't continue with another episode explaining why all the science I've laid at her doorstep is nonsense.

Sydnee: Well, unless I take this ginkgo biloba, lutein and lion's mane you've just handed me, I guess.

Justin: I guess, but—

Sydnee: Maybe I'll be better— tell you what. Let's do a clinical trial. Next Sawbones, I'll be all hopped up on gamer supplements.

Justin: Well, don't waste them. They were pretty expensive. But how did I get them?

Sydnee: I'm not taking these. I won't take these.

Justin: How did I get them? How did pay for them? Well, friends, through your support. No, that's not true. [laughs] They were not expensive, they were generic forms of these medications, 'cause I can't get the real stuff.

Sydnee: This is a mushroom pill. You bought a mushroom pill!

Justin: My GNC doesn't have the good gamer stuff I crave.

Sydnee: Man, we're on a list now. We're on so many lists.

Justin: All the lists. The list we wanna be on is a podcast I've pledged money to to help them keep going. Maximumfun.org/join is that address. This will be our last ask on Sawbones, um, but we are so appreciative if you are able to help us. It is so meaningful to our family and to all of us that you continue to allow us to work for you and make these shows. So, if it's something you've thought about doing, I would ask that you do it right now. Because the research shows that if you're doing it while you're listening to it, while you're thinking about it, you're much more likely to actually do it. So if it's something that's important to you, please do it now. Maximumfun.org/join.

Sydnee: Thank you.

Justin: Thank you. And thanks to the Taxpayers for the use of their song, Medicines, as the intro and outro of our program. And thanks to you, the listener. Until next time, 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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