1237 Brandon Pre SS USE THIS

[00:00:00] **Brandon:** One in seven teenagers have hearing loss. How far are we out [00:00:05] from translation? If I'm in Germany or wherever somebody is talking to me, it's translating instantly into [00:00:10] my ear. If I have a family member or myself that I want to know, are [00:00:15] they depressed? What's their state of mind? The hearing aid can pick up the voice and get a [00:00:20] trend on, is this person depressed?

How long until my star keys are listening to the people talking to me and [00:00:25] telling

[00:00:25] **Dave:** me who's lying? You're listening to The Human Upgrade with Dave Asprey.[00:00:30]

Today, we're going to talk about [00:00:35] hearing. In the world of biohacking, I say you change the environment around you and [00:00:40] inside of you so you have full control over your own biology. With that control, it means you can choose [00:00:45] whatever you want. And one of the biggest variables for how your brain [00:00:50] functions, even for how you age, is It's your hearing, because we receive [00:00:55] light and we receive vibrations on our skin and we receive [00:01:00] vibrations in our ears as sound.

And you've probably heard some of the music [00:01:05] that I've made for 40 years of Zen that I've played for you on different episodes, where we're using [00:01:10] music to change your brain. And we've all heard of drumming and Tibetan bells and [00:01:15] light sound goggles and all the different ways that, oh my gosh, hearing is, is foundational [00:01:20] to consciousness.

Well. I wanted to do an episode about hearing [00:01:25] because I've had some hearing problems that I haven't talked [00:01:30] much about, if ever. You might know that I had Asperger's syndrome growing [00:01:35] up, and one of the things that happens with that is the way you perceive reality with your [00:01:40] ears, with your eyes, with the whole nervous system, it's maladaptive.

It's [00:01:45] not. Normal, which could be good or could be bad because being normal just means being [00:01:50] average. But what I found was that I had to work really, really hard to hear what [00:01:55] someone was saying in a loud environment. And if you're listening to this, that might be you as well. [00:02:00] Or you may say, it doesn't really bother me, it's hard or whatever.

It just took ten times more effort for me. [00:02:05] And through my path of rewiring my biology, I figured out that [00:02:10] I had gaps in my hearing. So I could hear very high pitch and very [00:02:15] low pitch, but in the middle, there were just little narrow windows, like potholes in my hearing, and that didn't [00:02:20] match in each ear.

And it was a major undertaking, many months of intense [00:02:25] work to just teach my brain to sort of overcome that. And I became familiar with the [00:02:30] research that shows as you age, as your hearing goes down, that's one of the biggest risks [00:02:35] of dementia. And I've also been influenced by, well, all the superhero [00:02:40] books and movies and science fiction and the thoughts of having way better [00:02:45] than human hearing.

And is there a way to do that? So, I found a guest for you, someone [00:02:50] you're going to want to hear from. His name is Brandon [00:02:55] Suwalech, and he has hired only 5, 000 people [00:03:00] to work on the problem of hearing for a very [00:03:05] long time. And he works at the company you may not have heard of called Starkey, he's the CEO.[00:03:10]

And this is a guy who's going to teach us what's possible, [00:03:15] including science fiction stuff, like being able to hear 75 different [00:03:20] languages and have them translated in real time for you. So you actually are the smartest person in the [00:03:25] room and you'll have a brain that works better than everyone else as well.

Brandon, [00:03:30] welcome to the show.

[00:03:31] **Brandon:** Thank you for having me. And, uh, thank you for this important topic because it's [00:03:35] not something that, you know, people get excited about or think about, but you just [00:03:40] framed, uh, framed it up exactly where. I'm taking Starkey and what we're [00:03:45] doing.

[00:03:45] **Dave:** Starkey makes hearing assistive devices, or what some people would [00:03:50] call hearing aids.

And growing up, my grandparents had a big, bulky thing, and I [00:03:55] remember my grandfather got his and goes, This is great! I can hear again! And we're thinking, This is great, he stopped [00:04:00] shouting. But it feels like the industry is doing a good job. different now because, oh, maybe [00:04:05] six months or so, Damon John handed me a star key [00:04:10] and I said, all right, I'll give this this a try.

And I don't [00:04:15] have hearing problems now, but I still wired into my phone. I got it all set up [00:04:20] without having it properly fitted. And I just was, Oh my gosh, there's a whole world [00:04:25] around me that I do not perceive. And when I had those in, and I'm [00:04:30] actually going to get fitted for Starkey's properly after this episode, I just realized [00:04:35] I am filtering out a huge amount of reality in my ears that I could be [00:04:40] tuning into.

And is it beneficial for

[00:04:43] **Brandon:** people to hear more [00:04:45] than they do today? Absolutely. Hearing is essential. Hearing is healthcare [00:04:50] and you mentioned your grandparents and I've grown up in the industry. I've been around it. My [00:04:55] grandmother started in 1959 and helping people. [00:05:00] So the technology and innovation isn't even close to what it was.

10 [00:05:05] years ago. Because you look at today's media movies, the movie up I always go to, [00:05:10] right? Or others, you Bitch. It is like the big piece of bubble gum and you're in it's whistling. That's [00:05:15] not today's technology. That's not what we're doing. But that's the stigma [00:05:20] and why people don't want to improve their hearing health or [00:05:25] have that superpower stigma's the number one issue because they don't know what they don't know.[00:05:30]

[00:05:30] **Dave:** And when I look at what happens like with an AI powered [00:05:35] assistive device, or I don't really even think hearing aids the right word for it [00:05:40] because it's something that lets you hear things in the room that you couldn't otherwise hear, even with normal [00:05:45] hearing and something that does translation for you and something that even tracks your [00:05:50] health, I'm thinking that this is really useful.

Oh, it also lets me listen to [00:05:55] things on my phone when I don't want to hear all the whatever's going on around me. So [00:06:00] it's. To me, a way of having a fine grained lens on my reality using technology so I can [00:06:05] get more or less of what's in the sound environment, which means I control my consciousness better.[00:06:10]

Do you see it that way?

[00:06:11] **Brandon:** Absolutely. People want to hear better. That's job one. They want to hear better [00:06:15] noise. That's job one. Don't get me wrong. But since 2017, I wanted to take a, [00:06:20] you know, a swing at it. Moonshot idea. Big thinking. How do we redefine [00:06:25] hearing aids? Because it's not, it's hear tech. You know, it's wearable.

[00:06:30] And I'm a Marvel fan. Think of it as Jarvis in the air, the, you [00:06:35] know, that personal assistant, whether you have a hearing loss or not, it helps [00:06:40] you, you know, just even just a little bit better if you even don't even have a hearing loss, [00:06:45] perform better each, each and every

[00:06:46] **Dave:** day. It's interesting as people age.[00:06:50]

The brain gets less inputs. So it, it starts to shrink. [00:06:55] And when people get cataract surgery, their dementia goes down and their IQ [00:07:00] can even go up and they are less depressed because there's more signal coming into the brain, [00:07:05] more signal coming into the brain. It's like more exercise for it, and then more [00:07:10] vibrancy, more neural connections, and more awareness.

And if the [00:07:15] two primordial senses are sound and hearing, then we do that for [00:07:20] sound. Well, one thing is, okay, let's say you're old and you've experienced hearing loss, or maybe [00:07:25] you have a genetic thing, or maybe you just went to a lot of concerts, okay, a lot of young people have hearing loss [00:07:30] like I did, and you just don't know it.

If it's not one of those situations and you just have [00:07:35] normal hearing, but you turn up the amount of auditory information, what does it do to your brain [00:07:40] exercises?

[00:07:41] **Brandon:** It makes us more fit because you mentioned in [00:07:45] your opening, you mentioned spaces gaps, and that's [00:07:50] what it doesn't matter if you're 55 75 85 25 [00:07:55] your brain.

If you have a hearing loss, Your brain has the gaps and what [00:08:00] we're doing, we talk about hearing, we're exercising the brain. Yeah, five [00:08:05] senses. You know this better than I do and you can talk circles around me on, on, on [00:08:10] each one. Sight is vital. Hearing feeds and [00:08:15] feeds your brain. Connects you with people and life and what you're doing [00:08:20] and people don't correlate the two per se.

So what we're doing is filling those [00:08:25] gaps and not just going back to, you know, going back to the stigma. It's [00:08:30] not just elderly, you know, the 65 plus, one in [00:08:35] seven teenagers have hearing loss. One in seven right now, because [00:08:40] why? Gaming, headphones, music, you name it. And [00:08:45] people, you know, don't take action on it because I'm not going to die from [00:08:50] it.

There's, you know, usually there's about a seven year, you know, journey. [00:08:55] That, you know, okay, now I need to do something about it. You won't know you have hearing loss [00:09:00] until it's pretty far gone. Because you forget about the things

[00:09:02] **Dave:** you miss that you're not, you're not hearing. [00:09:05] Hmm. How

[00:09:06] **Brandon:** far are we out from translation?

Just to be able to hear? We can, [00:09:10] the goal is and has been since the beginning, instantaneous, [00:09:15] where if I'm in Germany or wherever somebody's talking to me, it's translating instantly [00:09:20] into my ear. I think we are less than five years out. Wow. So it's [00:09:25] It's happening. It's happening. Starkey is limited by the technology that is [00:09:30] available because I'm not it's not about a money thing.

It's about what can technology [00:09:35] do. I was a

[00:09:36] **Dave:** CTO and co founder of the first company to get heart rate from the [00:09:40] wrist. And funny enough, we sold them to Intel, where your CTO's from. There you go. [00:09:45] And it was really challenging then. And I remember thinking, man, the wrist kind of [00:09:50] sucks. It's It's not as good as even as a fingertip for getting biological data, [00:09:55] but it's a nice form factor.

So now we have rings that can do that, which are better, [00:10:00] but the inner part of the ear is so transparent. It's [00:10:05] almost an untapped area for getting vital information about how [00:10:10] not just hearing works, but how blood flow works. How heart rate works. Are you guys detecting Blood

[00:10:14] **Brandon:** [00:10:15] oxygen, a lot of different things because as I showed you here, we can, We can put a sensor [00:10:20] right in here and I can measure heart rate.

Also, the other thing, kind [00:10:25] of getting ahead of myself on innovation because it gets me excited is, [00:10:30] you know, think about where the world is, especially post COVID and everything else, mental health. [00:10:35] If I have a family member or myself that I want to [00:10:40] know, are they depressed, what's their state of mind, [00:10:45] voice, the hearing aid can pick up the voice and get a trend [00:10:50] on, is this person depressed, what kind of mood, and then get, you know, for that week, [00:10:55] that month, so if somebody has a grandparent, family member, whatever it might [00:11:00] be, and if they're okay with sharing, we can know, not us, but the [00:11:05] family member can know, you know, what state of mind that person is in, based on their [00:11:10] voice.

[00:11:10] **Dave:** Is it based on the inflection of their voice? Or is it Okay, this is really [00:11:15] important. So, if you're listening to the show, you might have heard the episode with Steven [00:11:20] Porges, who's the father of polyvagal theory, understands how the [00:11:25] vagal nerve works. And he's using voice inflection to determine the state [00:11:30] of your nervous system.

So this is not about having a surveillance thing Thing listening. No. To what you [00:11:35] say. It's about how you said whatever it is you said. So you're not recording what they said. You're recording [00:11:40] how their voice changed as they said

[00:11:41] **Brandon:** things. The patient has it. We don't have it. [00:11:45] They have to give access to a family member because for me personally, that's one thing I don't [00:11:50] want you go back to Sigma.

We're not big brother but if you think about what that [00:11:55] inflection in that voice, if we could help one person and it [00:12:00] costs us 1, 000, 000 to develop, it's worth it. Just like fall detection. I mean, and I can go down [00:12:05] the list, you know. You can't put price on the quality of [00:12:10] life, you know, somebody that has hearing loss that you don't know anything about it, what happens, [00:12:15] they draw inward, they're not going to talk about it.

I'm not gonna say, huh, you know, social isolation, [00:12:20] social, exactly, loneliness, and I've [00:12:25] seen it. I've heard stories and I can, you know, say this, for instance Bob [00:12:30] Hope, who were you know, had a horrible hearing loss until he passed, [00:12:35] and we, um, Took care of him, tried to take care of him, but he [00:12:40] was, you know, for, for whatever reason, reason [00:12:45] inward, and he would have the parties at Palm Springs.

So he would stay up in his room. I get, I could [00:12:50] go down the list and I'm not, you know, I say that not to name drop, [00:12:55] but to say that it's real because people want to be [00:13:00] engaged and if you can't hear. Right? Helen Keller, [00:13:05] blind and deaf, and she said if she had a choice, she would want to hear it, because that [00:13:10] connects you with life, that connects you with people, and we have seen that [00:13:15] over and over and over.

You just, you're isolated.

[00:13:18] **Dave:** The amount of [00:13:20] Freedom that creates for thinking and innovation and creativity and [00:13:25] connection. It's hard to put words on that, and it's something that I really struggled with in my [00:13:30] twenties, and I would say I've got about 80 percent of that problem handled through [00:13:35] hundreds and hundreds of hours of retraining my brain, and I [00:13:40] know that I still get more tired, and I still have a harder time.

You know, if there's a bunch [00:13:45] of fans on and someone says something a little quietly, I'm like, what? And I think other people [00:13:50] would be able to hear it, but I don't have any shame over that because it's not a big problem. But if you're in that Bob [00:13:55] Hope situation where you're overwhelmed because you're just taking all of your energy to try and hear what [00:14:00] people are saying, and then you're saying, what, huh, what?

And then you don't like how it makes people, of course you're going to be [00:14:05] isolated. Social isolation makes your brain shrink and leads to dementia and [00:14:10] Alzheimer's risk. So Number one, do something so you don't have to say what all [00:14:15] the time, and number two, do something so that even if you're not saying what, your [00:14:20] cognitive load goes down.

And people might have noticed that I'm wearing these funky [00:14:25] glasses, the Trudart glasses. This is a company that does circadian biology and light [00:14:30] filtering because it's similar with with your eyes. Right. The amount of [00:14:35] visual stress from LED lights, it reduces willpower and cognitive function. So for my [00:14:40] brain, if I'm in a super noisy environment with crappy lighting, my willpower will be [00:14:45] less.

I have several companies in my portfolio, I write books, I do podcasts. In fact, [00:14:50] Forbes named Bulletproof as one of the top 20 most innovative countries in the [00:14:55] country when I was running Bulletproof. So, Where does my innovation energy come from? I promise you it's not [00:15:00] from filtering out blue light and static in the background.

I want to get rid of those in my life [00:15:05] so that I can be present and focused. And I'm, I'm actually really excited to get my star key [00:15:10] and to be able to use it in part because I listen to an audio book and no one's going to know it. Right. But also because [00:15:15] the amount of free energy for thinking and

[00:15:17] **Brandon:** being will go up.

And, and you, [00:15:20] you, you touched on a thread there where my thinking is that is people get a hearing aid [00:15:25] because of the reactive, right? And we need to be proactive [00:15:30] what you're doing with your glasses, right? And I came to your conference six months ago [00:15:35] and walked the floor with David and got a lot of nice stuff.

I got a pair of [00:15:40] glasses and I think, okay, I'll try them. I sit in my office at home or work like. [00:15:45] Yeah, I can, I don't know how to explain it, and I'm not just saying this because you brought it up, [00:15:50] I feel just like with hearing, I want hearing ease for the patient, my eyes are [00:15:55] easier, it's easier, and I can feel it, I don't feel like I'm straining, and, [00:16:00] and, you know, for hearing, it's the same thing, you don't want to strain, so we need to get it, [00:16:05] the stigma is going down, but let's get reactive where, [00:16:10] you know, my goal is I want to eliminate the stigma.

Stigma to the [00:16:15] majority because there's 455 people in [00:16:20] the world that have hearing loss, 40 someone, 455 million, excuse me, [00:16:25] 44 million in the U. S. And there's so many more that's not [00:16:30] identified. Help them up front where people can be the best they can be [00:16:35] each and every day for their family, for their job, for [00:16:40] society.

Think about everybody that had hearing loss. One more idea, [00:16:45] one more thought, one more contribution. That's what hearing health is, [00:16:50] because it's not the ear and the eardrum, it's the brain.

[00:16:53] **Music:** Yeah,

[00:16:54] **Dave:** it's funny. [00:16:55] I've oftentimes said that the TrueDark glasses are like noise canceling headphones for your eyes, and everyone knows what I'm talking [00:17:00] about.

[00:17:00] **Brandon:** They really are. I don't know how to, I mean, I, I was impressed. Sorry, but I was just, this [00:17:05] was like, my eyes felt easier. It just felt

[00:17:08] **Dave:** It's the easier, that's why I'm bringing it up [00:17:10] again, is that sense of ease, like, it's like, you're walking around carrying a [00:17:15] 50 pound bag and you don't know it, and one day someone comes in and takes the bag off, and you're like, wow, I can [00:17:20] move better, so most people have turned on noise cancelings over [00:17:25] your ear, bulky headphones, one time I go, wow, it just got quiet, and you feel the [00:17:30] body relax.

Right, yeah. The idea here [00:17:35] with Starkey is that even if you don't have [00:17:40] a hearing loss, if you have the ability to create that kind of peace in your [00:17:45] auditory environment in a loud environment, that's going to improve your performance today, [00:17:50] and it's going to keep your brain from aging as quickly. It's going to lower physiological stress.

It's [00:17:55] going to free up willpower. So, I use glasses to control my visual [00:18:00] environment, and my plan is to use Starkey to control my auditory environment. [00:18:05] That's a good one two punch. There you go. Changing the environment around you and inside of you to have control of your [00:18:10] biology is the definition of biohacking.

Now I can use technology to change my [00:18:15] auditory environment in a way that wasn't possible until today. That's why I'm really stoked on this.

[00:18:19] **Brandon:** And [00:18:20] we're not done. Because if we can help You know, more and more people [00:18:25] understand. And again, I appreciate you having a podcast on [00:18:30] this topic because it's not sexy, right?

I mean, people like hearing aids, hearing, [00:18:35]

[00:18:35] **Dave:** super

[00:18:35] **Brandon:** hearing

[00:18:36] **Dave:** powers. It's kind of sexy to me because I really want to be [00:18:40] superhuman. If my glasses let me have x ray vision, I would do it. Yes. And if [00:18:45] my hearing lets me hear stuff in the next room that I'm not supposed to hear, probably can make money with that.

[00:18:49] **Brandon:** [00:18:50] This isn't for somebody retired. Think about somebody that. Is in the primary of their career in their forties and fifties that [00:18:55] they, they, they want that as they want that boost, they want that superpower in their career that [00:19:00] could help them and just hear one little thing, a little bit clearer [00:19:05] and have a leg up because you can hear CRISPR as I mentioned, but.

It's the syllables. [00:19:10] It's, it's the, it's your feet on the, the, the ground. It's, it's everything, you [00:19:15] know, you would be surprised, you know, there's a lot of famous people, a [00:19:20] lot of, they can get, you know, wealthy and name it that perform [00:19:25] musicians, world leaders, when they're hearing, or they're hearing it, or they're starting to get, starts to go [00:19:30] out.

It's almost a steady, but It's a panic [00:19:35] and they want to, they, they call us and they need to get it fixed because you can't hear that piano key. [00:19:40] You can't hear that sound. You know, this was [00:19:45] 10 to 15 years ago before technology, what it is today. And similar to Bob Hope, [00:19:50] Arnold Palmer told me, cause he, we took care of his hearing for decades.

But [00:19:55] he told me that once he was fit, he could then hear [00:20:00] how the, his club hit the ball. Exactly what you're talking about the games and [00:20:05] this is before the advanced superpower technology, he could tell how his swing was, [00:20:10] was he slicing, hooking, he could hear that ping and he [00:20:15] remembered back in his prime, what that sounded like, even a different [00:20:20] type of club head, but he could tell how he was hitting the ball and striking the ball and he told me that [00:20:25] personally,

[00:20:26] **Dave:** you know, my favorite sport is table tennis or ping pong [00:20:30] and, I bought a table when Dr.

Daniel Amen who's a dear [00:20:35] friend and a scant, I'm on Dr. Daniel Amen's board of directors. His work [00:20:40] profoundly showed me about 25 years ago. Oh my gosh, my brain is a piece of hardware and I can manage that. [00:20:45] It's not a moral failing. It's not that I'm trying to hear and I can't. It's like something's wrong.

Let me fix it. [00:20:50] So, the reason I bring him up is he said, Dave, you should play ping pong because it's [00:20:55] going to make the left, right hemispheres go. So my son's maybe five and I started playing with him [00:21:00] and we've played hundreds and hundreds of hours. And the way you play ping [00:21:05] pong when you get really good is you hear the sound of the ball hitting the table and it [00:21:10] tells you how much spin it has.

It's not just visual, it's very auditory. [00:21:15] And. You want to be really good at that people listening to this. There are a lot of professional athletes who [00:21:20] listen to the show who have for years. And I'll bet you money [00:21:25] that some of them are going to call Starkey for performance enhancement. [00:21:30] They're not playing anymore, but I'm just thinking the Bryant brothers would be prime [00:21:35] examples.

Nick is, uh, really into that into anything that will enhance [00:21:40] performance. So again, it's the, the sound of the thwack, right? So this is [00:21:45] free information. And if I can have tech filter out all the crap information that I don't need [00:21:50] and focusing on the sounds that are useful for me, I'm going to perform better.

And this is why I'm interested. [00:21:55]

[00:21:55] **Brandon:** Because think about this. Cause I'm talked to professional sports leagues, [00:22:00] ones that are very popular, and we're talking about amplifying. [00:22:05] Think about. Noise cancellation, where you got the home field [00:22:10] advantage or there. The opposing teams in the stadium, all the [00:22:15] noise, think about filtering that out so you could hear the play call, think about [00:22:20] hearing the, you know, the, the ball off of the bat, you know, [00:22:25] exactly what you're talking about.

So there's different ways to approach this because it's not just about, [00:22:30] yeah, I'm 75 years old and I need to hear and I'm in a retirement home. [00:22:35] People are active. People are not retiring. People are living longer. I mean, you want to be 180. [00:22:40] God, I hope I could get you know, 80, you know, [00:22:45] I think you can't, but point is people are working later in life because they want [00:22:50] to, because I believe and firmly believe even before we've had in depth talks [00:22:55] that you retire, you're done, you retire.

I mean, you just start, [00:23:00] you got to stay active and the ears, eyes, brain, that's going to keep you [00:23:05] active. You know, what's funny,

[00:23:07] **Dave:** there are studies showing that [00:23:10] smelling things like essential oils in the middle of the night change the quality [00:23:15] of your sleep and even increase IQ and that's gonna

[00:23:18] **Brandon:** give you some recommendations on [00:23:20] this one that

[00:23:22] **Dave:** don't need Taco Bell,[00:23:25]

[00:23:26] **Brandon:** but you're right. I can see that. Sure.

[00:23:28] **Dave:** It's, it's, in fact, there's a company out there [00:23:30] somewhere looking at doing timed essential oil things, but probably just putting on your pillow helps. [00:23:35] Yeah. And it's because the olfactory sense of smell also goes [00:23:40] directly into the brain. Right. And so if you've modified the signal coming in, [00:23:45] taste, smell, touch, sound, light, these are all [00:23:50] variables that you get to play with.

You get to decide what, what happens. And I think that's. [00:23:55] A profound shift in our ability to work with technology. Right. There's also [00:24:00] studies showing that kids who live on the lower floors of [00:24:05] buildings have lower IQs than higher floors. And it's because of the noise [00:24:10] pollution. The higher up you are, the less noise pollution.

[00:24:11] **Brandon:** Sure.

[00:24:11] **Dave:** I never thought about that. So chronic noise pollution is bad for you. [00:24:15] Being able to hear what you want to hear with less effort is good for you.

[00:24:17] **Music:** Right.

[00:24:18] **Dave:** So. I am eager [00:24:20] to have noise canceling on most of the time, because if I never heard the hum of a city [00:24:25] or a fan in the back again, my brain will only have more peace.

I don't want to make money off

[00:24:29] **Brandon:** people's [00:24:30] misery. Let's help up front. Our largest customer in the United [00:24:35] States for Starkey is the Veterans Administration. VA, Veterans, right? [00:24:40] And the number one and number two chronic hearing, [00:24:45] or excuse me, health issue with veterans is what? It's hearing. And [00:24:50] tinnitus ringing of the ears and I, and I've, I've told [00:24:55] members of the Senate, Congress, presidents of the United States, others, [00:25:00] I hope the VA is not our largest customer in 10 years because it could be avoided [00:25:05] because I want to do good and do things that help people up front be the [00:25:10] best they could be.

Because I think, no, I think, you know, I would both agree. Our world needs to [00:25:15] listen a little more to each other. I think you just need to calm down and just [00:25:20] listen And we can help up front and avoid [00:25:25] the issues that veterans and other people about the age of 60 or so [00:25:30] experienced or earlier.

[00:25:32] **Dave:** How long until my star keys are listening to the people talking to me and [00:25:35] telling me who's lying?

Ooh, like a, yeah, outside

[00:25:39] **Brandon:** of a mood [00:25:40] ring, your voice inflection, like a, like a lie detector. Voice inflection won't tell you. I've never had anybody. Mention [00:25:45] that.

[00:25:45] **Dave:** I have a very weird brain for that.

[00:25:46] **Brandon:** Yeah.

[00:25:47] **Dave:** There is no reason that it should not be able [00:25:50] to, anytime someone either uses manipulative language or has the [00:25:55] wrong tone of voice, that it's not going to display a little tone.

Detect something.

[00:25:58] **Brandon:** Yeah. Yeah. [00:26:00] Consistency or yeah,

[00:26:01] **Dave:** no, yeah, absolutely. I'm sure DARPA is listening right now and they probably just classified what [00:26:05] I just said. But seriously, help me spot narcissists with [00:26:10] my star key and I will give you all my money.

[00:26:12] **Brandon:** Oh gosh. I, I, I'm right there [00:26:15] with you. I've never, you know, we have a roadmap.

We have a lot of ideas, [00:26:20] but I've never had anybody suggest that I'm going to. [00:26:25]

[00:26:25] **Dave:** There's so much richness in a signal around us that we don't think [00:26:30] about because it's invisible and because I'm a biohacker, that's where I play. And I [00:26:35] want to know what they're saying in a foreign language so I can communicate better.

[00:26:40] I want to be able to listen better. And maybe my nervous system isn't as good at some people as figuring [00:26:45] out, like, who's manipulating me. So I've interviewed Robert Cialdini, who wrote the book [00:26:50] Influence, one of the best books ever to see how sales and marketing and other people influence you without your [00:26:55] knowledge.

Why am I Starkey? Couldn't listen to what they're saying, be like, that guy's running, you know, number seven [00:27:00] playbook on your subconscious alarm system. Or, that guy's not [00:27:05] running playbook seven, but he's lying because his voice inflection is wrong. Yeah, we [00:27:10] might have some of that in our nervous systems if we've really suffered a lot at the hands of people lying to us, [00:27:15] or we could use technology to help us, right?

So

[00:27:17] **Brandon:** hook me up, brother, right? No, it's it's it [00:27:20] is that I, you know, I lightly say that it's that mood ring. It's [00:27:25] expanding that. And then the other thing is, you mentioned is sleep. [00:27:30] Think about what we can do in getting that those harmonic tones that putting somebody in a [00:27:35] deep state of sleep. I know we have a lot of the calm app and stuff, but I've got a [00:27:40] hookup for you.

[00:27:40] **Dave:** Love it. The guy runs a company called sleep [00:27:45] space. Who's been on the show a couple of times. He knows how to [00:27:50] play certain tones to increase the amount of deep and REM sleep. [00:27:55] And where should you play them? He's got the best algorithms in the industry. I'll hook you up. Yeah.

[00:27:59] **Brandon:** [00:28:00] Dan Gartenberg. I had a meeting on four o'clock yesterday because that's [00:28:05] probably shouldn't be saying this, but hell with it.

I'm CEO. I could do that. The joy looking out. Well, I [00:28:10] mean, I welcome competition, bring it on because it makes you better. Is Starkey public or private? Private. [00:28:15] You can do whatever the hell you want. That's right. I can. I can make the decisions and the, uh, [00:28:20] owner, founder who is, uh, still alive, very active.

He's seeing patients right now. He's our [00:28:25] best technician. He's 82 years old. And that's how we [00:28:30] know what the patient needs. And he's had the vision, a lot of stuff he [00:28:35] talked about in the 90, 80s and 90s. And. I get the thrill of [00:28:40] bringing it to reality. And so four o'clock yesterday, we were just having a [00:28:45] discussion on sleep and those, cause he's, he's, he has a problem [00:28:50] sleeping, right?

I can fix that. And it's those deep harmony, putting somebody in [00:28:55] a deep state of sleep. And we were just talking about what's next and how we, cause [00:29:00] again, you know, better hearing, but those health features [00:29:05] and that falls under the health because yes, sleep is a big industry, but You [00:29:10] know, you know better than I do, because I've read what you've said, I've read it all, sleep, restoring the [00:29:15] body, you've got to have it.

What better way than right here?

[00:29:19] **Dave:** Well, if you have [00:29:20] the ability to reduce noise in the environment, that'll improve sleep. And if you have the [00:29:25] ability to know what Phase of sleep you're in and then to play the right sounds that [00:29:30] in clinical studies backed by three million dollars of NIH research that Dan has done [00:29:35] Will increase deep or REM sleep.

This is cool stuff

[00:29:38] **Brandon:** Yeah, cuz we were just talking [00:29:40] about okay Who can we cuz you know, you hear the big name the Bose sleep the sleep pods sleep buds all [00:29:45] that Who's out there on the cutting edge? Who's doing what's next, [00:29:50] not trying to sell a commodity or so what's next? And that's the kind of [00:29:55] technology that stuff I'm looking for.

Well,

[00:29:57] **Dave:** congrats on having the future [00:30:00] oriented mindset as a CEO, especially of a larger company. It's really hard to maintain that. [00:30:05] It's, I mean, I've worked with large companies. One time Coke, Coca Cola [00:30:10] had me come in and give a talk about innovation to their entire team leadership team. Like, how do [00:30:15] you do innovation?

And it's, it's oftentimes I think large [00:30:20] company CEOs end up becoming fearful and it's unconscious fear. [00:30:25] And to say, I'm going to go do all the work, but they're afraid of whatever risks. So then innovation

[00:30:29] **Brandon:** [00:30:30] dies. No, you can't, you can't let that happen. And for me, for me is I'm [00:30:35] big, if I don't want to be the smartest person in the room.

[00:30:38] **Dave:** Just hire them.

[00:30:39] **Brandon:** And, and I'm, [00:30:40] I'm talking about talking to you about a lot of innovation, what we're doing, it takes a team [00:30:45] and the talent and, you know, over the last, I'd say [00:30:50] five years. We have about 40, 50 percent new talent at [00:30:55] Stark because you got to find the right engineers. You got to find the people that can think big, those moonshot ideas.[00:31:00]

And, you know, I don't need to know how to be CTO, [00:31:05] CIO, ops. I'm the conductor of the band. There you go. That's [00:31:10] a good description. I go out and find the talent. I failed. You have to fail. [00:31:15] You have to embrace failure. If you're going to, if you're going to learn, you have to embrace failure because [00:31:20] you just mentioned people are afraid to take risks.

If you don't take a risk, you're not going to learn. [00:31:25] You're going to be complacent. And I say, it's Cherokee complacency has no employee [00:31:30] number. I don't want complacency. It drives me nuts. I don't want to be a blockbuster. [00:31:35]

[00:31:35] **Dave:** There you go. It's funny. The reason my new coffee company is called Danger Coffee, [00:31:40] it's because who knows what you might do.

Right. The idea of, of course, I'm going to take a calculated [00:31:45] risk and it's going to work or it's not work, but it was worth it to try. Absolutely. Yeah. And I [00:31:50] want a lot more of that kind of intelligent risk taking in the world because otherwise, [00:31:55] Renovation and evolution stop, right? And it looks like you're evolving [00:32:00] hearing aids in a way that that's fascinating to me.

Well, because

[00:32:02] **Brandon:** we're privately held. So it's what's best for [00:32:05] the, you know, the technology and innovation where your public company, you're worrying about the [00:32:10] stockholders and stock price, all that. You have, you know, risk adverse. No, I'm going to go for it. You know [00:32:15] what? Whatever happens, let's, let's find out.

[00:32:18] **Dave:** All right, there's one concern I [00:32:20] feel called to ask you about. Okay, please. Voltage [00:32:25] gated calcium channels. These are little parts of your mitochondria, and when they're [00:32:30] exposed to an electromagnetic field, they allow more calcium into the cell, which [00:32:35] causes cell swelling, which is the most likely reason [00:32:40] EMFs.

What evidence do we have that having [00:32:45] prolonged Bluetooth on our ears is safe?

[00:32:47] **Brandon:** I could wear 76 hearing aids [00:32:50] right now simultaneously and that will get equivalent to your cell phone. [00:32:55] Got it.

[00:32:56] **Dave:** Okay. So it's, it's very, very low power. Very low

[00:32:58] **Brandon:** power. Which is important. And [00:33:00] seven and, you know, 70 to 2000 times below the, the, the, the standard.[00:33:05]

And so it's. Compared to ear pods, right? Ear pods and, and so, [00:33:10] yes. Okay. So yours are substantial. We measure it and they're substantially low. [00:33:15]

[00:33:15] **Dave:** So the, the parts of that that I like are it's. Exceptionally low power, [00:33:20] even compared to what people are doing today. And I will admit that [00:33:25] today I use wired headphones on my iPhone because I have no [00:33:30] interest in having a high power Bluetooth signal in my ears all the time from [00:33:35] ear pods.

And that's cause they don't deliver any benefit over the wire. [00:33:40] And. I also use my phone and everyone listening, except for a few [00:33:45] people who are minimizing EMFs, also uses their phone because [00:33:50] they chose danger, because it was worth it. The benefits of being able to communicate with people are very, [00:33:55] very high.

And I don't have any issues with using an [00:34:00] exceptionally low power EMF shielded hearing [00:34:05] superpower device. If it gives me way more benefits than the risk. [00:34:10] That helps humans can be used to harm [00:34:15] humans. And I learned this in the very early days of making web 1. 0. [00:34:20] Like we were building this platform for sharing information that became a censorship engine.

[00:34:25] Oops. So I look at how would I misuse Starkey if I [00:34:30] was an evil dictator? What do you worry about?

[00:34:33] **Brandon:** I'm not worried. There's, I call it, [00:34:35] it's friendly AI because we were doing AI 17, 18 and it was back, [00:34:40] you know, I, I, I forget which Super Bowl it was. It was, one lady Gaga [00:34:45] jumped off the top. They had all the drones.

Well, CTO did that. [00:34:50] And so AI kept advancing and, um, It's [00:34:55] friendly AI because I want it for the individual because hearing is personalized. [00:35:00] It's not a commodity. It's not a consumer electronic. It's [00:35:05] personalized. And if anything, you know, where could you misuse it? I can tell you a quick funny [00:35:10] story where we came out with the first AI Livio [00:35:15] in 2018 and my son was 12 [00:35:20] and he could, he was like, Oh, I want a set.

That's the first time. [00:35:25] And then his friends, hearing aids are cool because why did he [00:35:30] want it? It could stream and then language translation. He wanted to try

[00:35:34] **Music:** [00:35:35] it.

[00:35:35] **Brandon:** So I got him a pair for his birthday. Who thought you're going to give a kid a [00:35:40] set of hearing aids for his birthday, but it's more of the wear tech and technology a little bit before his [00:35:45] time.

Fast forward a couple of weeks later and he's going to get upset. I might say this, [00:35:50] but I've said it publicly many, many times is, it's like, where's your [00:35:55] hearing aids, bud? I got grounded from him. What? You got grounded from him? I [00:36:00] heard that. I said, what happened? Yeah. Well, I was in French class. [00:36:05] Oh. And he was, he translated, he wanted to show his [00:36:10] friends and he got busted translating French through [00:36:15] our technology.

And I'm like, okay, you listen to my, but [00:36:20] I was resourceful thinking ahead, you know, and then like you're doing exactly, [00:36:25] I didn't say this, but I'm thinking of it because he has support, but he's doing exactly what, [00:36:30] you know, we intended to do not to cheat, but he didn't know he was cheating. He's being resourceful, right?

[00:36:34] **Dave:** [00:36:35] You know, I, I, Pay for OpenAI subscriptions for both of my [00:36:40] kids who were in high school, and I told them, I fully expect you to use this in [00:36:45] your classes because you're smart, and I expect you to not get [00:36:50] caught, and I expect you to not have it do your work for you, because then you won't learn. Right. And, [00:36:55] and what are they doing?

They're saying, hey, Can you teach me this thing that my teacher [00:37:00] didn't explain in a way I could understand? Right. And they're learning really fast. Right,

[00:37:04] **Brandon:** right. What's wrong with that? [00:37:05] I mean, it's actually what's supposed to happen. Right. And it's just like our cell phones. I mean, [00:37:10] you knew your home number growing up.

I knew my home number. I don't, I hope my kids know their, [00:37:15] you know, know their number because we memorize, but we use and rely on technology [00:37:20] to make it a little bit easier. Open AI, make it a little bit better. I don't want to open [00:37:25] AI to write a speech for me. I want to maybe a

[00:37:27] **Dave:** terrible speech,

[00:37:28] **Brandon:** right? Right.[00:37:30]

But I know what I want to say. But if there's a couple words or things that I get, sure, I'll look at it just [00:37:35] like Google use it as a resource.

[00:37:37] **Dave:** There you go. It's it's about using appropriate [00:37:40] technology. And that's why I wanted to talk about what you're doing with Starkey. There's a A couple [00:37:45] asks I have as a former Silicon Valley computer hacker and CTO and [00:37:50] one time vice president of cloud computing security for a publicly traded [00:37:55] company.

You have the opportunity to build your architecture at the company to [00:38:00] prevent surveillance. Yes. Or to enable it. And if you build it so that even if you get a [00:38:05] court order to do something that your technology can't do, you can say no. [00:38:10] So. If you're doing language processing on the [00:38:15] Starkey that's on my ear, does that stuff go back into your data centers?

Why'd you ask that [00:38:20] question, if you don't mind? I asked that question because my entire career in Silicon Valley, I've [00:38:25] been working on things that make the world better. Yeah. But there's always some asshole out there who figures out a way [00:38:30] to use it to, you know, Control other people and accumulate power or wealth.

Yeah, I can see it. And since [00:38:35] you run a large, privately held company, you have the ability to, with [00:38:40] about zero cost, design your product architecture so that [00:38:45] it preserves individual ability to control things. So, If [00:38:50] my Starkey is set up so I get to set up the rules for what it does and no one else can change them, [00:38:55] that's cool.

And if whatever is stored on your system is encrypted with my key that you can't see, [00:39:00] you don't have to deal with the 10, 000 requests from small town cops who would ask to hear [00:39:05] whatever Dave was talking about three days ago, because you can't. Or, and [00:39:10] this is why Apple actually made it so there's stuff.

Like, sorry, we can't break our system because we designed it to be [00:39:15] unbreakable. So they don't have to deal with that. And so it's easy to do that. And that way, [00:39:20] people who use Starkey have even more confidence that when they choose [00:39:25] what they are going to hear, which is ultimately what you're doing, it allows, it allows me to discriminate.

I don't [00:39:30] want anyone else to get to choose what I hear. I get to choose what I hear. And

[00:39:32] **Brandon:** I appreciate you asking that because [00:39:35] you've, your experience and what you've done in your career. You've had those, those moments [00:39:40] and those ask, I haven't thought like that, to be honest with you. Well, let me help you a little bit.[00:39:45]

No, it's, you know, I appreciate it because that's not, cause [00:39:50] hearing how it, I think, like I said, we're in healthcare [00:39:55] and I don't think, you know, yes, I, you know, follow the news or anything, but I don't [00:40:00] think of our products like that. Cause I, to me, that's a waste of time.

[00:40:04] **Dave:** It is a waste of [00:40:05] time. And so we want to do is build it so that the kind of people who would think like [00:40:10] that, how can I help people, but how can I take away from them?

How is it [00:40:15] impossible to misuse Starkey? And I think it's an easy thing to do. And I'd be very happy to help you do that. [00:40:20] Okay,

[00:40:21] **Brandon:** I will take the, take the advice and the insight because I don't want to [00:40:25] do, I want to use our time and energy and resources for good. And I'm not trying [00:40:30] to sound like the, you know, the, you know, do good and not evil.

Okay. [00:40:35] But it's, it's true because so many people need hearing help [00:40:40] that can make the world better. It's the stigma and it's the education, because [00:40:45] again, it's not sexy. People haven't talked about this until the last two, three years. No, they haven't. It's sexy [00:40:50] now. It is. Superpowers are. It is. And that's, and you said [00:40:55] before we came in here, you said those words and that's, you know, when I was talking to Damon [00:41:00] and how he described it was like, I want our products to give people superpower and [00:41:05] you're, you're the first one that I've heard say that.

I don't think that was on my, [00:41:10] any bio sheet or anything. You guys didn't tell me to say that. Exactly. You and I are coming in here and just, [00:41:15] we're just ad libbing and that's exactly what, you know, I, I feel [00:41:20] we're doing is giving people their boost, a little bit of their superpower to [00:41:25] help, you know, the world be better.

Because there's enough of [00:41:30] that.

[00:41:30] **Dave:** One of the things that pisses me off in the world is, I go to the gas [00:41:35] station, and I put my credit card in the machine, and some person out there thought it'd be a [00:41:40] great idea to spam me with an ad, well, I have to stand there pumping the [00:41:45] gas with some asshole telling me to buy their car insurance or whatever.

Yeah. The human who [00:41:50] did that, who came up with that idea, that was an evil sort of like arm of [00:41:55] Satan or something that doesn't

[00:41:56] **Brandon:** they're violating your time. Basically, this

[00:41:58] **Dave:** was my piece and [00:42:00] my cognitive liberty, my ability to think about what I want. And you, you stole it and I'm [00:42:05] paying you for gas. Like, how about you die?

Yeah, that's what runs through. Then I [00:42:10] have to do a bunch of deep breathing and forgiveness exercises and return back to, I never

[00:42:13] **Brandon:** thought about like that, but I know [00:42:15] exactly. Cause I've thought about it when I'm in the moment, but you're bringing it up. You're exactly right.

[00:42:19] **Dave:** Right. I think [00:42:20] everyone is saying that.

And it's loud, right? Yeah. They have no right to do that. So I've dreamed since the [00:42:25] nineties, I want glasses that every time there's an ad, they black it out and they put like [00:42:30] a positive affirmation, augmented reality. I want my star keys to [00:42:35] recognize every audio ad on the planet and replace it with [00:42:40] something worthy of my attention.

Right. This is my dream. Can you help me?

[00:42:44] **Brandon:** Yes. [00:42:45] Just kind of like YouTube TV. You could skip and then it goes to your Zen, [00:42:50] right? Cause you notice commercials in some channels, they're louder [00:42:55] than the actual, you know, movie or whatever you're watching [00:43:00] because they want you to hear it. They blast that intentionally.

The, the gas station say, [00:43:05] you get out there like, what is all this? I mean, I know exactly, I could hear it at [00:43:10] Minnesota where I live and you know, it's, it's. It's noise [00:43:15] pollution. It's invasion.

[00:43:16] **Dave:** It is absolute noise pollution, and it was without my consent. [00:43:20] Yeah. And I think that having really smart AI star [00:43:25] keys allows me to take back control of my auditory environment.

And what you want to hear. That's what I [00:43:30] want. Yeah.

[00:43:30] **Brandon:** And that's something that makes you better during that moment. Mm hmm. Good [00:43:35] idea. Second grade. Yeah. I haven't thought about it.

[00:43:38] **Dave:** Love it. Well, I look forward to hanging [00:43:40] out some more and chatting about what other superpowers or brain [00:43:45] monitoring or just improvement of the human condition as possible.

You have a [00:43:50] unique piece of real estate on the human body inside the ear where you get better vagus nerve, you get better [00:43:55] blood flow, better balance, better brain access, and the ability to [00:44:00] manipulate a primordial sense. Thanks. So that it improves human reality. And I'm really so that's biohacking [00:44:05] 101. And so I, I'm really, really pleased you could come in.

[00:44:10] Well, I'm

[00:44:10] **Brandon:** pleased for you having

[00:44:10] **Dave:** it.

[00:44:11] **Brandon:** I'm pleased for you opening a world that quite frankly, [00:44:15] I didn't know existed because I focus so much in our industry coming to [00:44:20] your conference six months ago and learning and talking with you. You've opened up a [00:44:25] world of possibilities that, again, I didn't know it was there.

And

[00:44:27] **Dave:** let's continue. Sweet guys, that's [00:44:30] biohacking conference.com. It'll be in let's see, April [00:44:35] of this year, I think. April or March, shoot, I dunno. April or March in biohacking [00:44:40] conference.com. May 27th through the 30th May. Thank you. 'cause I asked about it before we came in. It's May, I dunno. I dunno. A month.

[00:44:45] It's now, so it's May 28th and it is bio hacking [00:44:50] conference.com, 4,000 people. And. You can go to Starkey. com? [00:44:55] Starkey. com, yes. Okay. So, you probably have hearing problems if [00:45:00] you listened to headphones a long time when you were young. And if you've [00:45:05] ever been in the military, you probably have a hearing problem.

And most people [00:45:10] never see an audiologist. It was life changing for me when I realized what was going on in [00:45:15] my mid twenties. And it was Really, really time [00:45:20] consuming and exhausting to train my brain to be better. And I am really [00:45:25] stoked to be able to get my Starkeys fitted right after this. So guys, go to Starkey.

com [00:45:30] if you're interested in getting in early on the idea of having hearing superpowers. [00:45:35] If you were to go back about 12 years from today, [00:45:40] The first wristband that could track your heart rate all day long, I was [00:45:45] a CTO and co founder, and the dream was someday we're going to have it on our finger, and today you [00:45:50] do, and we're at that point with hearing where what's happening now, this [00:45:55] is generation one of AI, it's not a hearing aid at all, it's an enhancement [00:46:00] device that allows you to have a deeper experience of reality, and I'm, I'm really, really [00:46:05] excited about this.

So my track record is damned good, both in tech and in biohacking on [00:46:10] predicting the future. I'm telling you, learn how to do this now and you'll have, you'll [00:46:15] have additional abilities that most people around you don't have. Just like when you first started putting butter in your [00:46:20] coffee, just like when you first started doing breath work and first started doing red light therapy and all the other stuff that you've [00:46:25] learned in the world of biohacking.

This is part of that starkey.com. [00:46:30] And thanks Brendan for coming in.

[00:46:31] **Brandon:** My pleasure. Thank you for having me. Thank you for bringing an important topic [00:46:35] to your viewers and, and again, helping me, uh, see a different light. [00:46:40] You got it. See you next time on the Human Upgrade [00:46:45] Podcast.