

## The Unlikely Connection Between Nose-picking, Viagra and Alzheimer's, a Fentanyl Vaccine & Sleep Apnea Tips

**Peter:** [00:00:32] Well, it's time for another Bedside Matters. Welcome, this is the podcast that addresses the medical issues that impact every single one of us, every single day. Hopefully, we're going to give you the answers you're looking for so you can be more informed and healthier. I'm Peter Tilden, joined by Anna Vocino and Dr. David Kipper. David, you always pick stuff that you're seeing in your office that impacts just about everybody.

**Anna:** [00:00:54] Yeah, today looks interesting. Two new discoveries of things you can do for Alzheimer's. We always hear about these developments with Alzheimer's, but these are actually things that you can do to help. Then we're going to be discussing new treatments for autoimmune disease. I'm definitely interested in that.

**Peter:** [00:01:08] And in This Just Happened, it's a groundbreaking vaccine for fentanyl, which is we know an epidemic and issue, huge issue. So, we'll find out about that. And our caller in Hey, What About Me? wants to talk about CPAP. And a recommendation for a breathing issue that a lot of people suffer with that intrudes on sleep, which is really, really important we know and can affect Alzheimer's, as we come full circle. So, let's get started.

**Anna:** [00:01:36] All right. Two new discoveries regarding Alzheimer's that will have a positive impact on people who are suffering. Am I correct?

**Dr. Kipper:** [00:01:43] Yes. I actually think these are going to be conversation starters when this news comes out in the general media. We talk about Alzheimer's a lot on this podcast, and we know how devastating it is and the sadness is. And, Peter, you pointed this out off-air how we always talk about these things, but there's really not much we can do about Alzheimer's at this point.

**Peter:** [00:02:08] You keep reading that they can discover if you have a general propensity to get Alzheimer's. But then they say, however, you find out...

**Anna:** [00:02:16] ...however, there's nothing we can do.

**Dr. Kipper:** [00:02:17] So there are two things now that are going to be coming out and the research verifies this. It's interesting. The first one is involving Viagra. So, up comes Viagra for some help here. And they found that people that took Viagra were less likely to develop Alzheimer's. And there were a couple different reasons for this. But they were able to come up with some very specifics.

This was done at the Cleveland Clinic. And they used an AI model for identifying Alzheimer genes, and they matched them with FDA-approved drugs, which were almost 1600 of these that may be able to fight Alzheimer's. And they actually found a little over 60 drugs that matched the potential to treat with the genes that are related to Alzheimer's.

This is where AI is going to really be helpful for us. And so with these close relationships of these drugs, the top drug candidate was Viagra. And they were able to confirm this with a couple different other studies. And they found, they looked through insurance claims from over 7 million people. And they found that men who were taking Viagra had about a 70% less likelihood to get Alzheimer's over six years.

**Anna:** [00:03:45] Is it a blood flow thing because Viagra opens up your blood flow?

**Dr. Kipper:** [00:03:49] Such a great question, Anna, always from you great questions. And the answer's no. But...

**Peter:** [00:03:55] I knew David was teeing that up. That was too big a tee up.

**Anna:** [00:03:58] He teed it up too much.

**Dr. Kipper:** [00:04:00] No, but I was serious about how you ask great questions. And what they did find was that the Viagra was able to grow neurons from stem cells. They took stem cells and they exposed these stem cells to Viagra.

And what they found was that the Viagra allowed the neurons to increase their growth and connections. So they strengthened these connections in the brain, and they also decreased these tau protein biomarkers. And so there were a couple different reasons that the Viagra seemed to make a difference. So this is I think going to be really interesting information.

**Peter:** [00:04:46] That's incredible. So I'm wondering, A) question: do you think they're going to find out multiple uses like they do for all of these diabetes meds for other illnesses because you can input that same kind of information?

**Dr. Kipper:** [00:04:59] Absolutely.

**Peter:** [00:05:01] Number two is when you're doing this kind of background again I always go for the researcher end of it. So you put in all that information, but you don't know of these people, how many had DNA from their parents that made them more susceptible to Alzheimer's because there were stuff that they didn't check. So maybe the people who were on Viagra, that it looked like they had less incidence of Alzheimer's, may have parents who had less incidence of Alzheimer's, so the DNA would indicate that. Did they also check that in here? Do you know?

**Dr. Kipper:** [00:05:31] Yes, they did. And, but to your general point, Peter, it's really interesting how there's a snowball effect when you start putting these medicines into the general population and you see how they are now affecting other illnesses.

So with specifically with Viagra, what they found was that Viagra helps with a condition called pulmonary hypertension. So what that is in English is that there is a pulmonary artery that leads from the long end of the heart that delivers oxygenated blood. But if that artery closes down, it creates a hypertension in the muscle of the heart. And that's a very serious condition. But Viagra helped reduce that and was a treatment for that.

When we look back at the semaglutides, we've talked about this over and over again, so we started out with it help with diabetes and then it helped with weight. Now it's helping with neurodegenerative disorders. Now it's helping with heart disease. So that is the point is that now you have this big population database that's taking medicines for other reasons. And some of these people have other illnesses and those other illnesses start responding in a way that they never had. And the differential was they're now on these medicines.

**Peter:** [00:06:57] And these companies are going to be incentivized. If I'm already Pfizer, I'm putting out this drug for something, and I see that it potentially can cure something else, every company is going to be going, let's do the vast research to find out what else, now with AI, these drugs could be acceptable for because then we can expand our sales. So that's a good thing, too, I'm guessing.

**Dr. Kipper:** [00:07:17] Yes. And these were studies in America. These weren't studies around the world. So when they extrapolate these studies into other countries, we're going to have a bigger database, and we're probably going to get other benefits and possibly other risks.

And speaking of risks, that's the other conversation starter that I wanted to bring up, a risk factor that has now been identified for Alzheimer's. And I'm going to give the three of you, Peter, Anna and Lorre, I'm going to give you the name of the risk factor. And I want you guys to tell me what you think it might be. It's called Rhinotillexomania.

**Anna:** [00:07:56] Something with the nose.

**Dr. Kipper:** [00:07:57] Yes.

**Anna:** [00:08:00] What's "tillexomania"? Mania means a lot.

**Dr. Kipper:** [00:08:03] What's a common thing that we do to our nose?

**Anna:** [00:08:07] Runny nose? Blowing your nose?

**Dr. Kipper:** [00:08:08] That we do to our nose?

**Peter:** [00:08:09] Pick your nose.

**Dr. Kipper:** [00:08:10] Yes. Bingo.

**Anna:** [00:08:12] "Tillexomania" means excessive picking of the nose?

**Dr. Kipper:** [00:08:14] So that's the medical term for nose-picking.

[laughter]

**Peter:** [00:08:18] I didn't mean to jump in so quickly with the picking, but I had a sense.

**Anna:** [00:08:21] Wow, you really knew. You really knew, Peter.

**Dr. Kipper:** [00:08:24] And, if this wasn't such a long Latin name, every 14-year-old boy would know that association. But it's just too hard to remember.

**Anna:** [00:08:33] Rhinotillexomania?

**Dr. Kipper:** [00:08:35] Yeah. Pretty good. Just flowed right off your tongue there. So it's not really difficult to figure out why this is. And do you guys have a guess of why picking your nose might lead to Alzheimer's?

**Peter:** [00:08:49] Is it the behavior? It couldn't affect physiology?

**Dr. Kipper:** [00:08:53] It's not the behavior. But what happens when you pick your nose? What are you doing?

**Anna:** [00:08:58] You're putting bacteria up in your nose.

**Dr. Kipper:** [00:09:00] Yes, bingo.

**Anna:** [00:09:02] See, I finally got one right.

**Dr. Kipper:** [00:09:04] No, you get a lot right.

**Anna:** [00:09:05] I'm due.

**Dr. Kipper:** [00:09:06] And that's what happens. So you now have these bacteria on your hands and your fingers, you put them in your nose. They go from your nose into your sinuses and from your sinuses. Remember we talk about the cribriform plate, which is an anatomic barrier between the sinuses and that part of your face and the brain?

**Anna:** [00:09:27] It's trying to protect you from your own dirty fingers, is what the cribriform plate is.

**Dr. Kipper:** [00:09:32] Yes, exactly.

**Anna:** [00:09:33] A shield.

**Dr. Kipper:** [00:09:34] And so those bacteria take a ride and they go up ultimately into the brain and they create inflammation.

**Anna:** [00:09:41] Oh, wow.

**Dr. Kipper:** [00:09:42] And this is what is assumed to be the mechanism. Why there is more Alzheimer's with people that have been picking their nose. Also starvation and malnutrition. And the way it works, to be more specific, is this changes the nasal microbiome. So the microbiome in the nose is affected, that creates the inflammation. And that inflammation is associated with neurodegenerative diseases like Alzheimer's.

**Peter:** [00:10:18] What this tells me is that AI, like you said, AI is going to be able to fine tune behaviors because they're going to be able to sample such massive numbers for these diseases, for these illnesses, for medicines. It's incredible. Ever thought you'd get down to something so specific as changing your nose microbiome?

**Anna:** [00:10:37] Are we going to have a suppository, a nasal biome pill that we can shove up our noses to do good bacteria up there?

**Dr. Kipper:** [00:10:47] No, but I think you can use these nasal rinses if you're starting to get material up there that you want to eliminate, there's just another way to do it.

**Peter:** [00:10:56] And, by the way, if they have fecal transplants from microbiomes that are off, if your nose microbiome is off, do they have a nasal transplant where you actually get mucus from somebody else's healthy nose biome, which you can then introduce?

**Anna:** [00:11:10] That's what I was saying with the thing. Put it up the nose. Transfer your nasal biome, your rhino biome.

**Peter:** [00:11:18] David, on a serious note, before we move on, are they able then to take a sample of your nose biome, your nose, and know what's wrong up there, that you've influenced it? Or that the biome is off?

**Dr. Kipper:** [00:11:30] Yes, and that's what they did. That's how they figured this out. They saw these changes in the microbiome and they associated these changes with inflammation. And we know that going from there, we know the inflammatory response relative to the development of these neurodegenerative diseases. So, yes.

**Anna:** [00:11:51] So this is fascinating, there are new treatments for autoimmune disease. Now there are bajillion autoimmune diseases. So I'm very curious are these new treatments for a specific kind? Are they for all autoimmune? Is it just for the immune system in general? Tell us more, Doc.

**Dr. Kipper:** [00:12:05] This is really great information, I think. And there are a lot of people with autoimmune diseases. And we know that with autoimmune diseases what we end up doing, because they create inflammation, we end up using steroids, we end up using prednisone-type products.

And there are a lot of problems with prednisone. You gain weight, osteoporosis, your mood changes, you have arrhythmias. So people with autoimmune diseases tend to be on the steroids chronically, this is not a one-shot deal.

So what they found was that, and what we know is, that there are B cells in our immune system that lead to creation of what we call autoantibodies. And these are these antibodies that attack our own system and create these autoimmune diseases. What's specific to these B cells is that they carry a molecule called CD19 on the surface of these B cells, and it's the CD19 that creates the inflammation.

So what they did was that they went in and created some CAR T cells. CAR T cells are genetically engineered T cells that are made in a laboratory that are designed to attack very specific cell products. And we use CAR T cells to treat cancer. These have been around for a long time.

So you take a piece of the cancer, and you create these CAR T cells to go after that protein on the cancer. We use these for infectious reasons. But now we're introducing this for autoimmune disease. So they created these CAR T cells that went after the CD19 molecules on these B cells that created these autoantibodies. So now what we're doing, as it were, attacking these B cells from the immune system that lead to autoimmune diseases and the inflammation.

**Anna:** [00:14:05] So, it's attacking the immune system, which is incorrectly attacking whatever the body part or thing is?

**Dr. Kipper:** [00:14:13] Yes, it's attacking the specific molecule on that immune cell that creates the autoimmune diseases. And so they studied through, does this make sense, by the way?

**Peter:** [00:14:25] So, are you talking about lupus, going after lupus, going after specific stuff that shouldn't be happening in your body and it targets that?

**Dr. Kipper:** [00:14:32] Yes. And lupus was one of the three illnesses, autoimmune illnesses that they went after. They went after lupus. They went after myositis, which is an inflammatory condition of the muscles. And they went after systemic sclerosis. So they had these three diseases that they went after.

So what this study does is it opens this up to other autoimmune disorders where they can now start looking at these CAR T cells. They can go after these very specific B cells in the immune system that carry the CD19 molecule that will knock that out. Therefore, they will knock out that B cell's ability to create these autoimmune diseases.

**Anna:** [00:15:18] Are there studies for people to like sign up or how would anybody get access to this? Because I just feel like every day I get messages because I have autoimmune, I have celiac, and lupus and colitis.

So I get messages from people all the time: "I just got diagnosed. My kid just got diagnosed." I mean, people are out there suffering. And there new ones I haven't even heard of. Like there's so many autoimmune diseases. So, how do people get this as a potential treatment?

**Dr. Kipper:** [00:15:42] So, for our listeners, what I would suggest in reference to your question, Anna, is to go on the internet and put in CD19 T cells, CAR T cells, C-A-R T cells, against CD19. And the information will pop up and you should find some centers that are investigating this.

Now, again, three of these illnesses have been successfully dealt with, with these CAR T cells. And it's a one-time treatment that resets your immune responses and it gives a durable remission. So to that end, if people can eliminate the need for steroids repeatedly and all the trouble the steroids cost, this is a huge advancement. This is wonderful.

**Peter:** [00:16:34] Is this going to be in the public realm for like an MS anytime soon, David, where it will be an accepted and available treatment?

**Dr. Kipper:** [00:16:41] Yes.

**Peter:** [00:16:41] And what's the time? Where do you think the time frame is?

**Dr. Kipper:** [00:16:44] Well, they've done these three diseases. These are sort of the bigger ones in the autoimmune family. And so the ones that Anna referenced are also autoimmune. And now I think you're going to extrapolate these studies into these other illnesses.

And that's going on now. And again they have shown that the remission rate, they've only been doing these studies for a few years, but the remission rate is sustained. And it's a one-time treatment.

**Anna:** [00:17:12] That's great, because I've got to say with autoimmune, like you talk about inflammation, you've talked about inflammation so much on this podcast. And anybody who has autoimmune has had that extra layer of like the body's attacking itself.

So you feel like you're constantly inflamed. It's a constant battle to like do everything you can to calm down. Don't ever stress, eat the right things, figure it out. And yet you still get a flare-up. So, it sounds really promising.

**Dr. Kipper:** [00:17:37] Yes, it's really interesting how we're harnessing our own immune system that is there to protect this. But, in this situation with autoimmune diseases, our immune system is actually not our friend. And now we've figured out a way to make the enemy our friend.

**Anna:** [00:17:55] That's great. I just I find it interesting because, if steroids are the only course of action, it's just so crappy.

**Dr. Kipper:** [00:18:02] Yes. I mean, again, steroids are our friend at some point, but over time they become our enemy.

**Anna:** [00:18:09] So, and with autoimmune you have it for your whole life. So if you're just having to take steroids for your whole life, that's not...

**Dr. Kipper:** [00:18:16] And autoimmune illnesses run in families. These are genetically transmitted. So someone in a family that has an autoimmune disorder, just look up your family tree and there's someone else that might benefit from this.

**Peter:** [00:18:30] And this week's This Just Happened, David, fentanyl is a scourge of our country. I mean, it is an epidemic. And now the breakthrough seems to be that they came up with a vaccine. And I'm curious to see how the efficacy of this vaccine is. And is this the solution to the fentanyl problem?

**Dr. Kipper:** [00:18:49] This is unbelievable information. And if you consider the statistics that 150 people die daily from these overdoses, that's a big number. And to show how strong fentanyl is, fentanyl, when it's ingested, it's 50 times stronger than heroin. And it's 100 times stronger than morphine. And imagine a grain of rice. One tenth of that weight of that grain of rice is the equivalent of two milligrams of fentanyl. And that's a fatal dose. So it doesn't take a lot of fentanyl to kill you.

**Peter:** [00:19:30] How is a vaccine going to save us from this fentanyl epidemic?

**Dr. Kipper:** [00:19:34] So, the University of Houston, who developed the vaccine, came up with – and it to me this sounded like not that this wasn't a great breakthrough, but it sounded like a pretty simplistic way to look at this. They created anti-fentanyl antibodies. Remember fentanyl is a manmade product. It's not a natural occurring product. And we know that in laboratories now we can create these antibodies.

Think of what we did with Covid. They could do what we're doing now with these mRNA vaccines. And the antibody binds to the consumed fentanyl and it prevents it from entering the brain. It just invalidates it so that now that fentanyl can't get up to the brain.

Remember, fentanyl is ingested. It's either snorted or it's swallowed. So it's not something that is shot directly into the vein. If it is, you're dead in a second. But so for people that are not sure if their cocaine or methamphetamine or Xanax, you know, or any of the benzos or even the opiates that they're using for pain are also laced with fentanyl, if they have this vaccine, they're not going to die from fentanyl.

Now, what's interesting about this, to extrapolate from the general opiate discussion, is that the vaccine is specific for fentanyl. It's not generic to all opiates. So if you get this vaccine and then you break your ankle and you need a Vicodin for two days, it'll work.

**Peter:** [00:21:12] So how does it save me from a fentanyl overdose? When does it have to be administered?

**Dr. Kipper:** [00:21:18] It's a one-time deal. You get this vaccine, now you have these antibodies. And, you know, two years from now, you somehow get exposed to fentanyl, you have these antibodies.

**Anna:** Wow.

**Dr. Kipper:** Yeah, it's life changing.

[music]

**Peter:** [00:22:42] To top it off, you get to ask questions. And in this week's Hey, What About Me? we have a question about breathing, sleeping. So, here's that question.

**Speaker 1** [00:22:50] Hey, Dr. Kipper, my name is David. I'm from Florida. Thank you, if you're able to take my question. Quite frankly, I have huge tonsils. The surgeon was telling me that I have deviated septum. I have severe sleep apnea. I hate the CPAP machine. I'm considering the surgery. The surgeon is not saying it is going to cure me, but it certainly couldn't make it any worse.

If you could give me some guidance on a good way to approach this, if I really don't want the CPAP machine, and I have huge tonsils, and I'm deathly afraid of sleep apnea contributing to heart disease and death.

**Dr. Kipper:** [00:23:31] David, thank you. This is a very interesting question, and it's something that I deal with almost on a daily basis in my office, because sleep apnea is so common and people that are diagnosed with sleep apnea, the first thing they say to you, is this going to kill me? No it's not, that isn't the question. The question they ask, do I have to wear that mask? And so to David's point, this is really the knee-jerk reaction when you tell them when they might have sleep apnea.

But, again, sleep apnea. We've talked about this before. It's a bad disease to have. And it's a problem with getting enough oxygen into your lungs when you're sleeping. Because when you're sleeping you lie back and the tongue goes backwards. If you, in David's case, happen to have large tonsils or adenoids or even a large uvula back there, and you're blocking the entrance into the lung, you're not going to oxygenate as well.

And you have these episodes of apnea where you actually stop breathing. And the more of these episodes you have, the more likely you are to really suffer the very serious consequences from sleep apnea, diabetes, stroke, heart attacks, and definitely a shortened lifespan.

Also, people with sleep apnea at 4:00, they're walking around like zombies. So you can pick out people with sleep apnea at 4:00 if you are seeing people around you that are nodding off. You know, that's probably what's going on with them. So it is a huge problem.



And how do we get around that problem? And there aren't really great mechanisms, other mechanisms. David's talking about the surgery to have his tonsils and adenoids removed. I've never really seen that work well, because it's only one small part of this problem. But, you know, people that do that, good luck. And hopefully that'll make a difference. But I don't think it's going to solve the problem.

There are lifestyle things that people can do. We've talked about this so many times, you know, lose weight, exercise and you can put a humidifier by your bed, stop smoking, stop drinking alcohol. We know about all these things. There are other oral appliances that David could consider. And all of these oral appliances are put in there with one purpose, which is to bring the jaw forward, the tongue forward, so you're opening up the airway.

This is an issue with a relationship between you and your surgeon. And it's often, reported to me when patients come in that my doctor said he could solve my sleep apnea by taking out my tonsils or by fixing my deviated septum. Very unlikely that that's going to make a significant difference.

So I think you should explore a little deeper. There's something out now called Inspire, which has gotten a lot of press in the media. Inspire is a little device that is put under the collarbone, and it's wired into an area near the tongue at the hypoglossal nerve.

And this nerve is directly related to the motor function of the tongue. When this device sees that your airway is now being obstructed, it triggers, it activates, and it pulls the tongue forward automatically. And so the hypoglossal nerve gets activated, the tongue gets stimulated, the tongue comes forward. And now your airways open. And it does have some value.

**Peter:** [00:27:24] Is that a surgery?

**Dr. Kipper:** [00:27:26] It's a surgery. It's about a three-hour surgery. It's about 30 to \$40,000. Most insurance companies don't cover this. So this is not a practical solution for most people. And I've had several people that have had this done. Most of them say it doesn't really work. I've had a couple people that say it does work, so I don't want to...

**Peter:** [00:27:50] Wouldn't it wake you up when your tongue is being moved by this device that's implanted?

**Dr. Kipper:** [00:27:55] Well, one would think that, but not really, because you're sleeping, right? So the purpose of this is to prevent you from having apnea episodes where you're not breathing. So, if this keeps you breathing through your sleep, you're going to continue sleeping.

**Peter:** [00:28:11] So, is your answer for David, get over yourself and do the CPAP, you're going to feel the difference and it's going to be worth it? Or is it try the surgery if your surgeon says it could work for you?

**Dr. Kipper:** [00:28:22] My answer to David would be the latter, Peter. I would say, go ahead and do the surgery, because you need to be in control of your own health care. And if doing something that seems less invasive is more appealing – and I totally understand that, I would just keep your expectations realistic, David, and have this done and see if you're better. And then, if you're not, you can then move to the next step.

**Peter:** [00:28:48] So, let's recap today's episode.

**Anna:** [00:28:51] Today we talked about some conversation starters regarding Alzheimer's.

**Dr. Kipper:** [00:28:55] Keep your fingers out of your nose.

**Anna:** [00:28:57] Right.

**Dr. Kipper:** [00:28:58] And ask your doctor for a prescription of Viagra.

**Anna:** [00:29:02] There we go. And then we discussed some treatment options that are coming down the pike for autoimmune.

**Dr. Kipper:** [00:29:07] So, autoimmune diseases, now we can manipulate these B cell immune cells that create the autoimmunity. And we target the CD19, which is that molecule on those B cells. It creates the inflammatory response that gives all the problems with these diseases.

And now we have created a CAR T cell that can knock out that CD19 molecule and reduce, eliminate the inflammation. And these are one-time treatments and they have durability. And so these CAR T cells that we're going to be giving people with autoimmune disorders is a huge breakthrough for people with these diseases.

**Peter:** [00:29:53] And speaking of a huge breakthrough, in This Just Happened a vaccine to protect you from fentanyl.

**Dr. Kipper:** [00:29:59] So the fentanyl vaccine has been created. It seems to work. It works on the ingested fentanyl by creating an antibody that invalidates it and keeps it from getting into the brain. And these have been successful. And this is huge now for the fentanyl problem that we see in our country.

**Peter:** [00:30:18] And for David in Hey What About Me? I can't sleep well, but I don't want to use a CPAP.

**Dr. Kipper:** [00:30:23] Nobody likes a CPAP. And there are other alternatives which you should explore if you're really against any of these things, which I recommend exploring, but understand that none of these things works quite as well as CPAP, which works really well. And on the horizon is a pill that we may be able to use to get rid of all the apparatus.

**Anna:** [00:30:47] By the way, you guys, if you want your question answered by Dr. Kipper, there are so many ways you can get it to us. Head on over to [BedsideMatters.org](https://www.BedsideMatters.org) put your question in there. Follow us: [@BedsideMattersPodcast](https://www.instagram.com/BedsideMattersPodcast) on Instagram and [@BedsideMattersPod](https://twitter.com/BedsideMattersPod) on Twitter/X. Send us your question. It might just get answered on the air.

**Peter:** [00:31:08] And you can check out Anna Vocino's website. We hear pretty often about Anna's issues with some of the stuff like dairy, like sugar, like flour, etc. So what Anna's done benefits you because her entire site is about the sauces, which I love, and the foods, which are gluten-free and low or reduced sugar. And if you have issues with digestion and stuff, you should check out the site: [AnnaVocino.com](https://www.AnnaVocino.com).

And, of course, Dr. Kipper, the book is called *Override*, and it really tells you about why you behave the way you behave. And they're actionable. There's a quiz in there that helps you identify your behavior, and also how you can change your behavior, that you don't have to let the chemicals in your brain and your neurotransmitters control your life. Once you're aware of what's going on, you can actually make a difference and make some changes.

I want to thank producer Lorre Crimi. Thank you, Lorre. And you, thank you for listening to *Bedside Matters*, because, if you're sick and tired of being sick and tired, we're here to help. New episodes drop every Monday, so follow us, like us, have a healthy and wonderful week.

**Announcer:** [00:32:12] The information on *Bedside Matters* should not be understood or construed as medical or health advice. The information on *Bedside Matters* is not a substitute for medical or health advice from a professional, who is aware of the facts and circumstances of your individual situation. Thank you for listening. If you enjoyed the show, please share it with your friends. We'll see you next time.