Introduction to Kate Kunkel

Hi there, and welcome to this episode of the Reverse Alzheimer's Summit. I'm your host, Dr. Heather Sandison, and I'm delighted to introduce you to my friend Kate Kunkel.

She's a harpist, sound therapist, Brain Health coach and vegan nutritionist who turned her mother's tragic illness and death from dementia into her mission in life.

She brings 20 years of music, education, sound therapy, vegan nutrition and mindfulness teaching, along with a decade of research and coaching in brain regeneration to help her clients take control of their health and their future.

She's also the bestselling author of several books on Brain Health, including Don't Let the Memories Fade and The Musical Brain. Kate joins us today to share the incredible healing and regenerative power of sound and music to build a better brain.

You're going to learn quickly why I adore her so much. Kate, welcome. Oh, I think so much. So happy to be here with you again, Heather. It's wonderful.

So we were in an intriguing conversation before we hit record here, and I was like, Wait, you need to record all of this so that our audience knows. What is the difference between a sound therapist versus a music therapist versus a sound healer?

I think for a lot of people, they don't even realize there's a difference. Yeah, there's quite a difference, actually. So a music therapist is basically it's a licensed profession where the therapist is actually also a psychologist.

And rather than using just talk therapy, they're using music to encourage the patients to to get out of their funk, if that's what it is, or to help them expand their mind, you know, their thinking, their cognition, that sort of thing.

Music therapy is a very regimented, licensed, regulated profession. I am not a music therapist. I'm a sound therapist.

Sound Therapy vs. Music Therapy

And a sound therapist is actually someone who uses music and just pure frequencies. So a music therapist is going to use musical instruments. Like often you'll see a guitar or drums or that sort of thing, but a sound therapist, while we can also use instruments, and I certainly use my harp.

We can also use pure frequencies. And that's where the magic seems to happen when it comes to Alzheimer's. And we can get into that later. But we can use not just music, but also just pure frequencies.

And that that translates into a whole bunch of things that go on in the brain with neurotransmitters and hormones and that sort of thing. We can also compare that then to music medicine, and we hear that a lot now write music medicine.

And that's something that you can do yourself at home. There's no therapist involved, and it really involves listening to music that you love because when you listen to music that you love, another bunch of wonderful things happen to you.

You know, you become you get tuned into your memories. You get tuned into those feel good hormones. So that all happens with music, medicine. And so it's important to kind of understand, because if you do end up looking for

someone who can help you or a family member, then it's important to understand that distinction because there there are not as many music therapists who are available to do this kind of work because you really need one on one in most cases.

Right. So with sound therapy, we've got that that whole thing breaking out. But it is not like a psychologist. That doesn't happen with sound therapy.

Got it. And there's so much that's so relatable. I think every time we chat, I share just the experience that I myself have had listening to different types of music.

And I think we all have this right. Like I'll hear a song from my senior year in high school and feel invincible and like the whole world's ahead of me.

And then I'll hear some Rihanna song and like, be ready to get on a plane to Vegas. And then I'll hear some, like Elliott Smith or some music to kill yourself to and feel like winding the day down.

Right. And so I think that most of us can relate to this experience of hearing some music and it changing our state, like our state of mind, our sense of our wellbeing or or not being right, of feeling kind of sad or down.

And so there is almost like a peace in this that's just about awareness about and mindfulness is a big part of your practice, but being aware of the sounds we are exposing ourselves to.

So I want, I want you to discuss that. But then I also want to jump right into what do we do for someone with dementia? How can we help and how can we support the brain?

Sure. So this is a really good and important part also for people with dementia, because the sounds that we are surrounded by have a huge impact on us, even if we're not aware of them.

You were talking about mindfulness. When you stop and you listen to your environment, you may say, Wow, makes me feel really good. Or it may be that you're already feeling a little bit agitated and you go, That's what was making me feel kind of angry or upset because there's something in your environment that is causing a frequency and it is about frequencies that are disruptive to you.

So I always encourage my clients and everybody to really be mindful, pay attention to your sonic environment.

How Sound Affects Mood and Environment

And we have a little program that we do to check off the things that are going on. It could be traffic noise. It could be the neighbor's dog barking incessantly.

It could be the TV in the next room. Those things can really change how your body physiologically is is functioning because the cells get agitated. You know, all of those things do affect us on a physical and an emotional level.

So by just being conscious of that, if you can then eliminate the things that are bothering you or at least reduce their impact on you, that's one step.

And then to add things that make you feel better, whether that's music or whether that's listening to birds, you know, opening your windows and listening to the birds.

Those sorts of things have a huge impact on your mood and your brain. I can you know, I think, again, this is just so relatable, like the sound of the dryer buzzing.

I'll feel it in my body that I get tense and a little irritable. But now that I've talked to you enough times, I can go, Oh, it's just my body responding to the dryer buzzing.

So you mentioned there are particular frequencies that are really good for cognition and Alzheimer's, even where where can we go specifically? Can you tell us more about that?

And how do people get access to something like that? Sure. So we know and this is coming from my work as a vibro acoustic therapist. So Vibro acoustic therapy is where we actually have sound going through our body by touching something like a lounge or a cushion or something where you're actually physically connected to the source of the sound.

There are usually computer generated frequencies that are fed through an amplifier into the system, and you feel that that's where this information comes from.

It has been being worked on since 1960. This kind of work has gone on from 1960, and it was originally designed by a gentleman by the name of Olav Skille, who worked with children with learning disabilities and cerebral palsy.

So we know by monitoring the frequencies, by putting specific frequencies into these devices, how the body responds. 40 hertz has been studied ad infinitum, actually, many, many studies with Alzheimer's, other forms of dementia, with Parkinson's, with many different conditions.

We know that 40 hertz actually changes how the cells are vibrating their frequency when that happens. And this is this is something that's so interesting and fascinating when we are exposed to sound, it sends an electrical impulse.

So when when the cells in our body are exposed to sound and that can also be audible sound, they bounce into each other. Right? It's a cascade effect.

When that happens, electromagnetic energy is created. That electromagnetic energy turns into light. In our bodies, that light is, guess what, frequency?

Frequencies, Vibroacoustics, and Brain Health

40 hertz. And I know that you're doing red light therapy at Marama, and that is where that 40 hertz power comes. So we know that 40 hertz, whether it's listening to it, whether it's being exposed to it on a system of some kind, or if it's the electromagnetic bandwidth, then it's 40 hertz of infrared light, all of these things can enhance the body so that the brain cells can actually we can get night growth.

We can. And they've done tests. They've done research. They know that now there are certain circumstances that have to happen. And many of the things are like we teach as Brain Health coaches.

And you have in your work, you know, it's got to have the right nutrition. You've got to have all these other things set up. But we can actually make neuro rights grow.

How amazing is that? Inspire powered by sound. So we know that that's scientific. There's all kinds of research on it. The other thing is, when we are exposed to different frequencies, then our bodies also when we're different to sound of any kind.

Our bodies respond with either cortisol. If it's something that we don't like or other good things like let me say dopamine. We have dopamine being produced when we're happy.

You know, so it actually changes the hormones that are being produced in our bodies. How amazing is that? And that, of course, affects the neurotransmitters.

Yeah, we have so much control, right? I think a lot of times the refrain in the dementia spaces, like, there's nothing you can do, just go home and put your affairs in order.

And yet these simple three things like changing the auditory stimuli, what's coming in through the ears, we can

shift. And now we also know that hearing loss is one of the modifiable risk factors when it comes to dementia.

And so can you tell me, you know, how do you work with someone who's hearing impaired or worried about their loss of hearing? Well, obviously, they need to get it checked and they need to to get hearing aids.

I know that a lot of people have this whole stigma attached to doing that, but it's not something to put off because it's really important. But I can tell you, that sound therapy works even if you can't hear it.

And that's the most amazing thing. That's true. So when we have we used to have when I was a young woman, we had something called bone phones. And they were a way of feeling music.

There was like these. It was like headphones, but they were things that attached. And you felt them on your collarbone and you actually felt the music.

But we know that sound conducted anyway, and that can be singing bowls, or it could be vibro acoustics or whatever. When we have those frequencies actually going through our body, the effects on our cells work, whether or not we can hear them.

So that's a really important point when it comes to just on a cellular level, when it comes to hormones that because that is is we know that our body responds just like Beethoven could could not hear, but he could feel his compositions because he had the piano with no legs on the floor.

And that's how he composed, because he felt the vibration. That's pretty wild that this is coming in through multiple senses. Right. You can feel it and in your with your skin, but also like just that conductive through your system and then also through your ears and so there's multiple ways to do this.

Now, for someone with cognitive decline already, are there things that we would do different if, say, you're just concerned about developing cognitive decline later, you're in prevention mode versus trying to get that memory recovery?

Yeah. So memory recovery, the best thing to do, I really believe, is to be immersed in music that you love. And I'm sure you do that at Miramar. And we recommend that all the time in my coaching is to to listen to music that inspires memories.

But beyond listening to the music, we have the five senses practice, right?

Hearing Loss and Cognitive Decline

Where we not only have the music, we also have the other senses involved. So when we're listening to the music, that was perhaps when we maybe a big band or in my case it would be something from the Sixties or the Byrds or something.

Then we have the memories that go with that music as well. So then it could be like maybe a picture of being at a dance or a picture of you with somebody that you went to that dance with.

And then there could be food that or talk of food that you used to enjoy. When you when you go to those concerts, all those things can inspire even more memory because they're attached in a very tangible way to someone who might not be able to think abstractly in any way.

Right. So the more senses that we can involve, the better. Even if we are using music as immortality. I love that you're giving me inspiration. I can imagine it, Marama. Just having everyone go through.

Okay, my favorite concert or my favorite song is and here's a picture of that day, and this is who I was with and this is the food we eat. And that there could be a kind of a sharing of that and experience of sharing it and and cementing the memory or just coming back up with the memory.

That sounds really lovely. Or like going to a carnival, the smells in a carnival. You talk about that. You know, all of those things can come together and really pull the music or whatever sound.

The calliope for many of us has amazing memories attached to it. So then you think about the food and the smells and the and all the people around and and the experience of being on a Ferris wheel or whatever.

All of those things can come back and it brings our client, our patient, back to us for a while and it makes them feel more like they did before. It gives them the feeling of being a person again instead of just this vessel that they're struggling with. Right.

Because they get you get anger and you get frustration and fear, of course. Yeah. And what a fun way to relive something and get that validation. And you get back often when we go through these memories, we get back those same neurotransmitters, that dopamine and serotonin and the Gavin everything else that we had on that day.

Exactly. To relive it. And that changes is then how your brain is working, right? Because you've got those wonderful neurotransmitters, the hormones, you've got that actually working on your brain.

And with all of the other things, you do it. Marama And we all do with our coaching that just gives them more of a chance to get out of that a little bit to improve a little bit.

And for those who are not already seriously in decline, this this is a way to boost the cognitive reserve, the way to boost the cognition in the memory.

Yeah. Absolutely. Okay.

Using Music to Evoke Memory

So what are examples of how can we get involved by making music or I know I just kind of brainstorming here like, should we do this in this way? But what are practical ways people can use music as a therapy or sound as a therapy at home?

Starting today? A This is my number one go to everybody can do it, whether you're cognitively impaired or whether you're 100% sharp. I always recommend to my clients to start humming in a mindful way.

Of course, humming just humming is fine too, if you're humming along with the song, but it's really good to mindfully hum. And a good way to do that is by also breathing in a mindful way.

Right. Nice deep breaths. And then when you exhale rather than just exhaling, hum and really notice what's happening now for people who are more advanced in cognitive decline, it will be hard for them to kind of get that together, but they can certainly hum.

You may they may not be able to be mindful about what's happening here, but they can most certainly hum. But for those of us who are working on improving our brains and preventing this stuff by exhaling with a hum, then you are firstly you're stimulating the Vegas nerve and the vagus nerve isn't.

That helps us get into a parasympathetic nervous state, which helps reduce the cortisol, which improves all the other hormones and helps us think better and it communicates the gut and the brain.

So that's one thing that it does, but it also sends you into a place where you are paying attention to what's happening into your body. I think it's really important because people go through their lives and they don't even know how they're feeling.

But if you mindfully hum and I've got a couple of other things that we do also, it's a great way to get in touch with them. So just do it yourself when you're at home now watching me, watching us take a nice deep breath and when you exhale hum and really listen, close your eyes and really feel and pay attention to how that is making your body

feel.

If you really want to have some fun, cover your ears when you do it because then you feel it even more and you know, I bet you there are even people with with pretty far advanced.

I don't work with too many people like that because mostly I do prevention. But I would imagine that more people would be able to get involved this way, even if they are fairly advanced.

It would be you could make it into a fun practice at Miramar, you know, do that sort of thing. Well, Kate, you're talking about cognitive impairments, but I want to tell you, I'm a little embarrassed, but I am very musically impaired and so humming.

It feels accessible even to me. I don't have to be good at singing or I'm good at playing some instrument, which I never have been. I can still get down with humming.

So this is accessible in a lot of different ways and so easy. Now what if somebody is really into music? I would imagine that they clicked on this talk because they are excited about music and they want to learn more.

And so do we know how. I mean, I have a do you know who Xavier Read is? He's an Australian musician and he is like a one man band. He plays like 13 instruments and sings all at the same time and I just go like mind blown.

Don't know how anyone does that, but I can just think kind of at the upper levels, you know, humming on an exhale. It's like down here at the bottom and then there's a whole spectrum in between.

And like Xavier Red or somebody like him, like this one man band kind of bass, or you're playing multiple instruments and singing at the same time. Like, is there something in between, like for for people who are like, you maybe play an instrument.

Humming and Mindful Breathing

Yeah, yeah. So if you play an instrument, a lot of people played an instrument when they were in high school or middle school or something and then they haven't done it since.

Go find it dusted off and play it. And I can I can tell you, I taught Harp for many, many, many years. And people used to say, well, you know, I'm not really very good.

I, I don't want anybody to listen to me. I don't want anybody to hear me. But I can tell you it doesn't matter. It doesn't matter. Just enjoy it. Just make music.

Nobody cares. You're the only one who is judging this. If you're making music for yourself, that's all that matters. That's the thing I always told my students and it's the thing I tell my clients.

It doesn't matter. But I'll tell you a couple of things that are really, really easy that you can do, even if you've never played any, any, any instrument and even if you haven't played for 40 years, get a drum.

Just like one of those little Remo has some little drum pads and I say, Get that the actual physical thing as opposed to just using your legs or the table because it kind of makes you feel like you're actually doing something rather than just imagining it.

Get some cheap drumstick ice and just beat play along with a song that you love. Here's a great way to pull in the music that you love listening and then as you're drumming, just drumming along with it, even if it's just one one beat, every every measure doesn't matter.

The point is, you're really listening to the music because mindful listening to recorded music is almost as good for your brain as making music. Wow, that's a huge deal.

And that's so it's not passive. It's very active mindfulness. That's the difference. That's what makes it so much better for your brain. Absolutely, Leigh, because when we make music, we have that corpus callosum, the white matter that connects the two hemispheres.

When we are musicians, musicians and drummers or harpists who have pedal harps or pianists, where you using your hands and your feet, they actually have a stronger, thicker corpus callosum than other people.

And when you start listening mindfully to music, you're inspiring the same thing that happens for those musicians in your brain. It happens. So by listening mindfully then and playing along with it, or saying you like to watch videos, YouTube videos of an orchestra or something, pick one of the instruments that you can see and follow along with them.

Because then your brain is doing almost the same thing as the musician because you're listening for when it comes in and out of the music, you're you're watching the bowing, you're seeing how the I love cello.

I don't play the cello, but I love it. And I always watch the cello when I'm watching an orchestra or a chamber, you know, a chamber, something like that, or a rock group and the bass guitar, right?

Because then you've got beat going, anything like that, where you're actually mindfully paying attention to what's going on with the music or you're playing along with it is great.

So I recommend drumming. And also if you happen to be in a situation like Miramar where you have a group, get a drumming circle going because it's so powerful.

Simple Instruments for Home Practice

All of number one, you've got other people around, you're engaging with other people, which is important. Number two, you're making rhythm. What are we from our first inkling of being a human, we are in our mother's womb and we hear her heartbeat.

We are rhythm. Humans are rhythm. We're all mammals are we're rhythm. So that's where it comes. It's a very natural part of us. So when you work with other people or you play with other people, just engaging with them and it makes you feel if it's somebody who's really cognitively impaired, it also gives them some feeling of accomplishment because then they're there keeping a beat and they're paying attention with other people.

It's engagement. It's so important. I love drumming. I've heard really incredible, miraculous stories of people with Parkinson's coming in a wheelchair, coming with really impaired gait, and they're having trouble walking that shuffle and tremor.

And after drumming, there's so much dopamine naturally produced in their brain that they are able to walk without a shuffle or or have their tremor goes away temporarily.

And so that act of drumming is is so engaging that you can see these really profound benefits and and so much relief. And I think having people be able to do that themselves without taking a pill can be really great for their well-being and mood and mental health.

Yeah. And, and if it's something like like like when you mentioned Parkinson's, we also know that using the 30 hertz frequency on the Vibro acoustics, I've seen it myself.

I treated many, many people with Parkinson's. And we can actually it's the same thing. It's the vibration that I don't know what it does. I don't know how it does it. I just know that it doesn't.

It interrupts the frequency of the tremors. And it's the whole I think it's the whole cellular thing, just vibrating and everything is in tune and it just seems to be the gate is better, the shuffle like the pick up, the feet better.

It's amazing. And that's all just sound. All just sound. We can do so much with it. Another good thing for people to do, excuse me, if they if they haven't played a musical instrument, I know it's going to sound like, oh, my God, my middle schooler does this.

But a recorder recorders are really easier to play. And you can make all kinds of fun noises. And they don't usually squeak too badly like either when instruments or flutes or something.

So recorders are another thing and they're inexpensive. They're accessible to everybody. You can make music with a recorder. How fantastic. Yeah. For New Years, my daughter in the New Year, she's going to take ukulele lessons.

And I just feel like maybe I should take some lessons with her and try to try to get into something simple. But the recorder is these simple instruments, drums, potentially a ukulele.

I don't know. What are your thoughts that. Oh, yeah, I love ukulele. I love and in fact, I'm just starting it myself now. About a year ago I started doing it because it's very simple and I tried guitar. It's not my instrument.

I'm a harpist, I'm a pianist. So they weren't really working for me. The guitars, but the ukulele. I'm having fun with it. It's light, it's inexpensive.

There are so many. If as an adult, if you don't want to take lessons in person, there are so many things online. And that's the great thing about the world we live in today.

Whatever you want to take up, there's something online. If you're too embarrassed to go to a course or a class or something, there are a gazillion free things online that you can do to learn that sinfulness.

Yeah, you don't have to. Cynthia Lynne is a lady who does the ukulele. She's Hawaiian, and I just love her. She. I play all of her stuff. I really enjoy it.

That's so great because sometimes it's not even like embarrassed to the logistics you live hours from a place where they were there would even be a lesson that you can take so having a zoom lesson if you want something one on one, but also these free YouTube videos that are accessible to anyone, anywhere in the world.

What a great idea. And that you could have a drummer and a ukulele or a recorder, something easy, simple, light, inexpensive to get into this. This is so inspiring. Thank you Kate.

And you know, there is actually I think it's Remo, the company that makes all kinds of drums, I'm pretty sure it's Remo. They actually have a free drum circle like you can join a drum circle.

Is it a R E M O, Remo? The Remo drums. Oh, fun. Yeah. So so there are many ways to get involved, you know, and, and without spending a fortune, without having to travel and instruments.

And I have to tell you, the folk harp people, because, you know, it's so hard. It is not it is very intuitive. It's like, see, TFG, ABC, anybody can make a folk harp sound good.

Anybody I can tell you, because I have taught people who are profoundly disabled, like mentally handicapped, many, many different people. I have taught to play the folk harp because it's so intuitive and so easy.

It was a folk instrument, right? I mean, the ancients used to walk around with them and they would tell stories with them. That's how news got spread from town to town.

So that's also another thing because a lot of people say, Oh, I love the sound of the harp, but it's got to be so hard. But it isn't. It really isn't that difficult.

Getting Started and Resources

Not the pedal harp. That's a whole different ballgame, but the folk harp. Well, I think of like tambourines and and maracas. You know, there are a lot of things, especially I think the percussion instruments, right.

That Yeah. Are pretty accessible. But a stringed instrument like a guitar or harp. Yeah. That feels to me I get intimidated very quickly. Yeah. Yeah. And understandably so if people haven't really done anything like that.

But a lot of people took piano lessons when they were kids. Right. So then at least it gives you that kind of idea of what a skill is and that sort of thing.

So it makes it a little bit easier, but nobody should be intimidated by it because it's not about performing. This is what people have to understand. It's just about joy.

It's about creativity, because that's a huge and that's hugely important for our brains inspiring creativity. It's just one of the things that we can do so easily and be happy, happy, joy, joy, happy, happy.

I love it, Kate I want to make sure that everyone knows that you have Brain Health Matters right behind you. You have a podcast host and you're a coach and there's so much you do and offer to those who are preventing or suffering with mild cognitive impairment.

But to let everyone know how they can find out more about you. Sure, they can go to brainhealthmatters.today. I've just got a new website going up in the New Year.

So by the time this airs, the new website will be up and running. I also teach people how to play and this is going to sound really scary to some people, but I do use the harp online to help people who are wanting to play something, but they want to feel more creative and they want to get involved in something.

So I do do that, which is a lot of fun. And I do have the podcast Brain Health Matters, and you can find it. All right. brainhealthmatters.today. How fantastic, Kate.

I'm just always so inspired. You are so creative and just such a shining example of someone who's really put a lot of effort and in and your heart into helping other people so they don't have to suffer the way that your mom did.

Thank you so much for transforming that sad loss into helping others. Thank you. Thank you. I may I say that as for people who are watching this interview, listening to it, I'm also offering a copy of my book, The Musical Brain, because it's a great way to dig into little tidbits all the way along.

Little exercises you can do. It's a gift from me to you. So that you're not worried about tapping into the power of music. You can just do it. It's right there for you to play with.

How generous. Thank you so much, Kate, for that gift. And just for being here, the gift of your time. Thank you.