



## **Is this the technology future for tinnitus treatment?**

### **Will hearing aids become a fashion item?**

Welcome to the latest Tinnitus Tunes blog and we wanted to let you know about the latest technology we have been trying out in our research lab – it is the Bragi Dash – a “hearable”.

“What is a Hearable?” I hear you say. A Hearable is the ear worn equivalent of wrist worn fitness trackers, for example the FitBit. Hearables have the standard features of wireless earphones plus tiny sensors able to pick up activity such as heart rate.

Hearables are very likely to go one step further in the near future and combine hearing aid functions. So soon we may have communication devices for hearing and logging onto our communication networks, very Sci-Fi! Will it be enough to make hearing aids a desirable fashion item?

I don’t know but it is a space that hearing aid manufacturers are becoming interested in. Starkey, a USA company, recently entered into a relationship with Bragi whose “Dash” Hearable was a winner at 2016s Wearable Tech awards. The Bragi Dash is one of the first wireless headphones to incorporate sensor technology. Merging of hearing aid and communications technology has been on the cards for a while, with another example being ReSound’s “made for iPhone” hearing aids.

We have given a link below to the You Tube clip of the Bragi Dash where they show off the cool features including the ability to take phone calls, listen to music, measure your heart rate, count steps, swim and listen to music because they are waterproof and the ability to customize the gestures you can use to work the device (this last feature potentially useful for people with limited mobility).

<https://www.youtube.com/user/hellobragi>

### **Ok so what does this mean for tinnitus?**

Cool gadget, yes, good quality sound, yes, ability to store tinnitus treatment sounds in the earphones, yes...and ability to monitor physiology. This later function may not seem at face value highly useful for a person with tinnitus, but heart rate can identify if we are relaxed and future sensors may enable us to relate sound therapy to other activity including measuring brain waves. Our research group has begun some interesting work in this space. We have begun studies to identify if brain activity (EEG) can be used to control earphones so that the best treatment sound is automatically selected.

We have also taken the liberty of extracting a customer testimonial from the Bragi website highlighting how it has helped one lady with tinnitus.

“Thank You Bragi!

I’m going to tell you a story, a story on how much the dash will change my life for the better.

3 years ago, I was diagnosed with severe tinnitus. A constant roaring in one ear. After a year of seeking some relief, I checked out sound therapy, and search for a sound that would drown out my roaring. I can’t go in public, as the noise is horrible and the tinnitus amplifies all sounds.

Long story short, I found the right sound through iTunes, a babbling brook. Problem I had was, when I went out, people thought I was rude, having my ear buds in (with cords).

I wasn’t able to hear anyone talk, due to the sound and the earbuds in.

I finally received mine yesterday (the Bragi Dash). The audio transparency with my babbling brook soundtrack in the background is the fix to all my problems.

I could just cry, I’m so happy. Been a long time that I’ve had some hope to be more social. Maybe now, I will be able to go out of my house, and talk to people, go to a restaurant even.

Thank you, thank you, I love them!!”

– Carmen D.

Another issue related to earphone use is the all too common, and tragic, situation of injury or death of pedestrians while wearing earphones. We’ve been working on ways to prevent this through automatic environment sensing by Hearables.

While some of these ideas appear like something out of Star Trek, the truth is they are just on the horizon. For now Hearables offer convenient wireless connections to our phones, and can be useful tools in tinnitus therapy (including the ability for you to listen to our Tinnitus Tunes sound therapy & brain training sounds). Plenty of interesting ideas and technology ready for research, now we need to be able to co-opt industry and entrepreneurs to get as excited as we are.

The Bragi Dash is not cheap but very nice at around NZ\$450 from New Zealand retailers and around US\$200 from Amazon. (Note if you are based in New Zealand and find that an Amazon reseller will only deliver to a US address, you can use the NZ Post You Shop service which has the item delivered to a NZ Post warehouse in the USA and then shipped from there to your home address).

You can if you wish order the Bragi Dash from Amazon via the Tinnitus Tunes website at <https://www.tinnitustunes.com/store/products/31>

You can also join Tinnitus Tunes and use the sound therapy via your Bragi device at <https://www.tinnitustunes.com/subscribe>

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