Neuro users say it: the everyday sounds better with speech-omni



A recent survey of 35 cochlear implant users conducted in three clinics has confirmed that the new speech-omni setting of Neuro 2 is preferred by most users¹ in low-noise environments. This is exactly the sort of situation in which the majority of listening takes place².

So what exactly is speech-omni? In short, it's a new omnidirectional setting – one of Oticon Medical's 22 unique³ technologies – that aims to deliver a more natural listening environment in low levels of noise, the typical listening environment for most users⁵. Using the principles of $\underline{\text{BrainHearing}}^{\text{TM}}^4$, the speech-omni setting is designed to help the brain make sense of sounds. That means less straining to catch what's being said and easier understanding in this kind of ecological listening situation.

Low-noise environments are where users spend most time⁵



A typical distribution of different directionality modes for FreeFocus users.

Designed to be closer to natural hearing

Figure 3.

Let's take a look at how it works. When the intensity of the sound remains relatively low, below 65 dB SPL, speech-omni uses slight directionality to get mid- to high-frequency sounds – speech cues – from the front direction. That's what makes it closer natural hearing.

The first evaluation results comparing speech-omni with opti-omni – the other omnidirectional setting in the Neuro system – are fresh in. And the good news is that the surveyed users definitely prefer speech-omni in low noise environments.

A clear preference for all types of user

In the evaluation, 35 cochlear implant patients compared the two settings in ten different listening situations to test voice clarity and quality, listening environments, speech intelligibility, music and TV listening, and voice height and speed – and there was no mistaking the results.



With speech-omni in low noise situations, every single parameter involving speech was significantly improved – regardless of how long the users had had hearing loss or had used a cochlear implant.

Over two thirds of respondents preferred speech-omni for voice quality



Averaged results (N=35), showing distribution of preference ratings in percentage of responses, for speech-omni in orange, opti-omni in blue or no-preference in grey. The dotted lines indicate the 33% chance level.

The speech-omni setting in the Neuro 2 is just one of many new BrainHearing[™] technological advances designed to bring more sound to the brain and make listening easier for every user. If you have any questions or comments regarding the Neuro sound processing technology, <u>please get in touch</u> and we'll be happy to answer them.

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4. Hoen M, Neel-Weile J, Holmberg M & Lunner T. (2018). Oticon Medical BrainHearingTM – Helping the brain make sense of sound. Oticon Medical White Paper. www.oticonmedical.com.

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