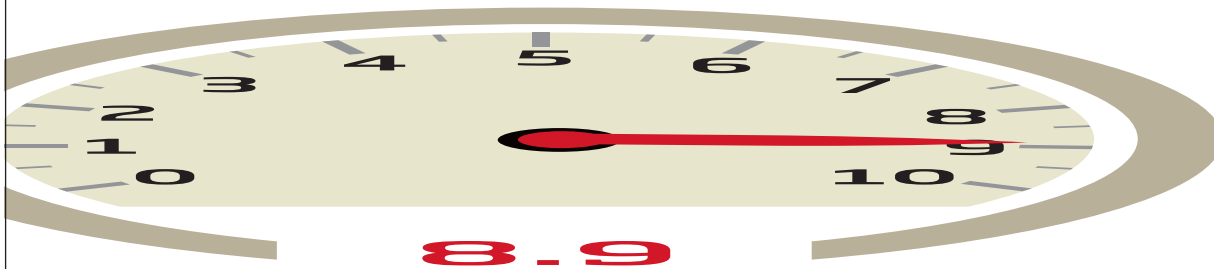


Rethink Super Power solutions with Chili!

– insights from the international satisfaction survey



Understanding the challenges

The previous studies into the super power segment have highlighted two important parameters:

- ▶ People with severe and profound hearing loss can find daily life so challenging that even the prospect of upgrading to new instruments can be overwhelming. Thus, any new instruments should be designed to be easy to get used to and use.
- ▶ Hearing care professionals perceive these clients differently due to the complexity of their hearing loss. Also, since the average hearing care professional sees only a few super power users, fittings are not considered routine. High quality instruments and dedicated fitting and counselling tools are in high demand.



**The Oticon Chili Satisfaction Survey, 2011. The purpose of this survey has been to determine Oticon Chili's ability to address the challenges facing super power users and hearing care professionals. The survey involved 85 super power users and 266 hearing care professionals in five countries (the US, Germany, Canada, the UK and France).*

Based on their experience with Chili, the users were selected by the hearing care professionals from their databases. All ratings were made on a scale from 0 to 10, with 10 being the best. For each question, the lowest and the highest ratings were assigned relevant labels.

More detailed information documenting this survey can be found in the White Paper: Chili Satisfaction survey, 2011, at Oticon.com.



General Insights* in living with severe or profound hearing loss gathered from users and hearing care professionals indicate that adjusting to new super power instruments demands a great deal of effort.

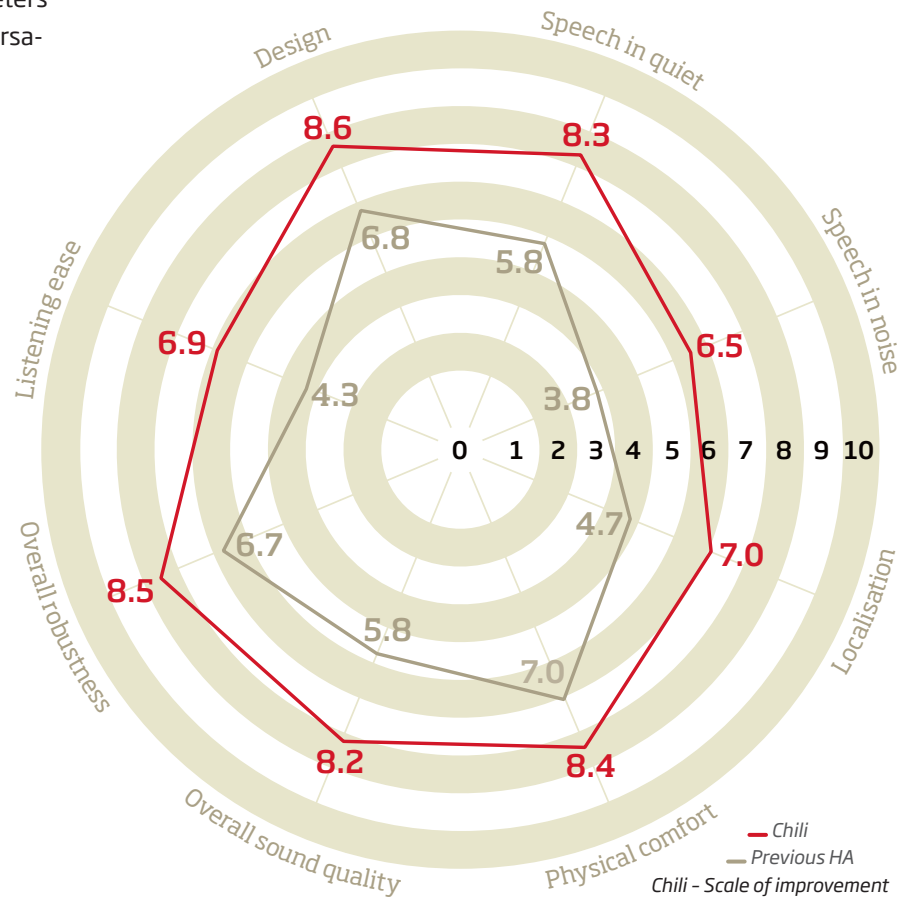
However, the results revealed in the recent international Chili Satisfaction Survey point in another direction - users participating in the survey found the Chili solution remarkably easy to get used to, reporting high satisfaction with vital parameters such as speech understanding, following conversations in noise and listening effort.

For users with severe and profound hearing loss communication is never easy, but the survey indicates clearly that Chili leads to more benefits and less hassle in everyday life.



Getting used to

With Chili (red line) With previous HA (grey line)



* Summary report: Power users. Based on interviews with experienced super power hearing device users and hearing care professionals conducted by Consultancy Design-it and Oticon, November 2009 to February 2010.

Higher satisfaction levels

The user-participants in the survey reported higher overall satisfaction levels with Chili than with their previous instruments. This can be attributed to improvements offered in a number of challenging situations they encounter every day - from noisy environments to talking on the phone and watching TV.

Overall sound picture scores

A key contributing factor to the increase in satisfaction was the way users experienced the new sound picture. Chili scored 8.2 - a significant improvement over their previous instruments (5.8). Considering how challenging it can be for these individuals to switch to and accept a new sound picture, these results are very encouraging.



8.3

Overall user satisfaction



8.2

Overall sound quality

More benefits – fewer battles

The feedback from the survey indicates that Chili delivers significant improvements in important aspects of communication.

Less “missing out” - fewer misunderstandings

Compared to their previous instruments, the participants reported significant improvements in understanding speech in quiet surroundings and - more importantly - in conversations in noise. They also reported an improvement in their ability to locate sounds. Finally, the degree of effort used in conversations was reported to be significantly lower than before.

More opportunities to hear and communicate

When using the phone or watching TV, people with severe and profound hearing loss often struggle to gain sufficient audibility, while keeping the

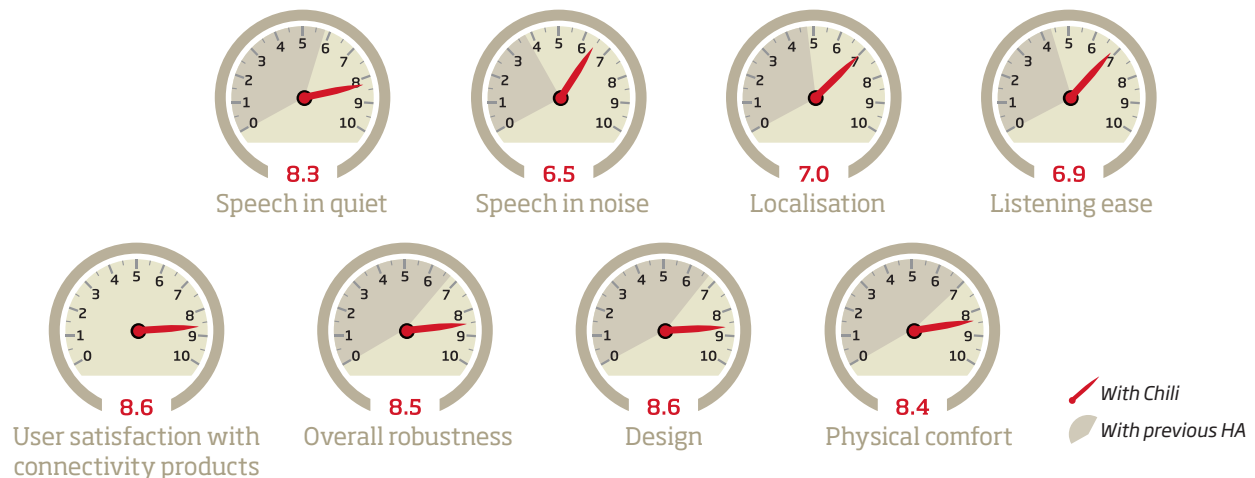
noise level acceptable for themselves and their surroundings. Connectivity solutions reduce this problem by transmitting the signal directly to the user’s hearing instruments. The 8.6 rating reveals high satisfaction with these solutions.

Peace of mind through greater reliability

Super power users depend so heavily on their instruments that reliability is essential. The score of 8.5 compared to an average of 6.7 for their previous instruments indicates that Chili is living up to the important reliability demand.

More confidence and comfort

For design and comfort, the survey participants rated Chili significantly higher than their previous instruments. They appreciated being able to upgrade from often larger 675 instruments to slim, modern size 13 battery instruments.



Chili makes super power fittings more rewarding



8.4
Recommend Chili to other dispensers

The study results convey a clear message that working with – and satisfying – super power users does not have to be difficult. The high satisfaction level is underlined by the fact that a high number of hearing care professionals stated that they would recommend Chili to other colleagues.

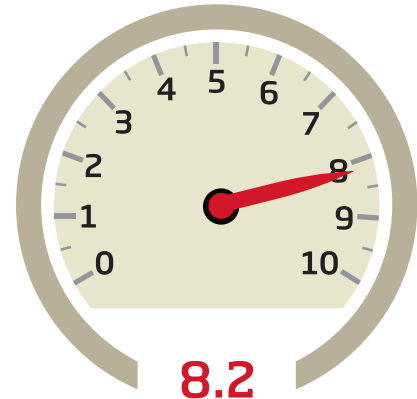
Based on their overall experiences with super power hearing aids, hearing care professionals reported that they were very satisfied with Chili. The average satisfaction rating was 8.2. This is in line with user feedback, as users also reported high satisfaction.



8.6
User satisfaction with connectivity products

New opportunities – through connectivity

It makes perfect sense to offer connectivity devices to super power users, as no one benefits more from the improved signal-to-noise ratio* offered by these solutions than they do. Connectivity opens up a world of communication opportunities – 45% of the respondents chose to utilise these opportunities with Chili, compared to only 8% with previous instruments. The connectivity options were very well received by hearing care professionals and users alike, with a high overall rating of 8.9.



8.2
Overall dispenser satisfaction with Chili



8.9
Dispenser satisfaction with connectivity possibilities

*Reference studies:

Sjolander ML, Bergmann M, Hansen LB. Improving TV listening for hearing aid users. Hearing Review. 2009;16(11):44-47.

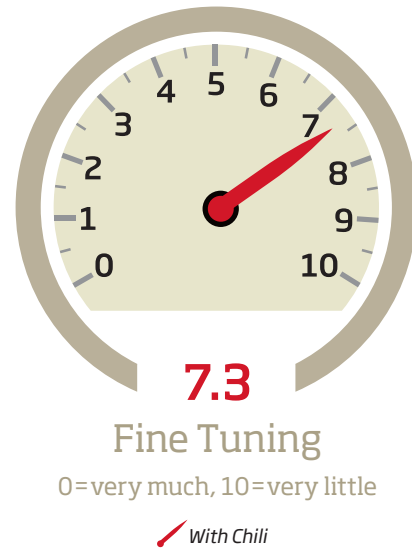
Beck DL, Holmberg M. Connectivity in 2011: Enhancing the human experience. Hearing Review. 2011; 18(3): 69-70.

Picou M, Ricketts TA. Comparison of wireless and acoustic hearing aid-based telephone listening strategies. Ear & Hearing. 2011;32:209-220.

Positive feedback on fittings

When fitting severe and profound users, more fine tuning is generally needed than when fitting for users with milder and moderate hearing loss. Bearing this in mind, the 7.3 rating indicates a very positive response to a potentially more complicated process.

Appreciating that hearing care professionals need all possible support, Oticon has introduced a new Genie fitting tool: the Overall Loudness Trimmer. The hearing care professionals in the survey reacted favourably to this addition and 72% find it helpful to some degree.



Features for overcoming challenges

Filling in gaps

In Chili, the compression strategy, Speech Guard, helps users fill in the gaps by providing access to vital speech cues. In combination with the Chili audiology and technology platform, Speech Guard has a significant, positive effect on speech understanding. This helps to reduce listening effort - as was also shown in the clinical, dual-site study* on Chili.

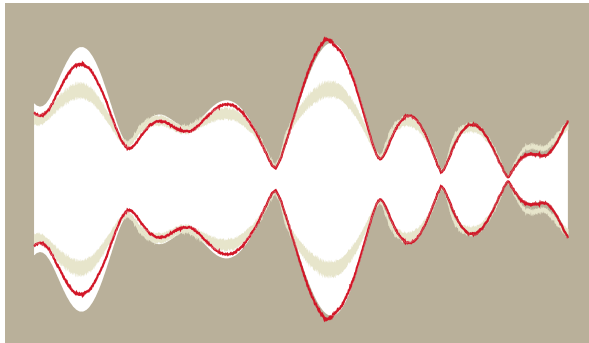
Balancing amplification needs

The DSEsp rationale is Oticon's dedicated rationale for super power users. It is designed to provide the

desired amount of gain for optimum loudness level of speech inputs across relevant frequencies. By utilising more of the user's dynamic range, Speech Guard and DSEsp keep the signal audible and with great sound quality.

Helping in difficult situations

In Chili the Speech Guard, binaural noise reduction and Split Directionality combine to deliver clear, comfortable speech in demanding situations. Both this survey and the results from clinical studies* confirm this.



Speech Guard aims at making sounds as naturally perceived and comfortable as possible for the user at any given time. Speech Guard immediately responds to rapidly occurring sounds, helping to reduce the annoyance and potentially distracting effect of intrusive sounds.

- Original clean signal
- Oticon Chili
- High performing competitor

**The effects of Chili compared to the participants' own hearing devices were investigated in a dual-site clinical test in Hörzentrum, Oldenburg, Germany and at Oticon, Denmark.*

The results showed significant improvement in speech understanding and significantly less listening effort in lab tests of speech. Questionnaire results showed significant improvements in speech perception and sound quality. On overall preference, 74% of the participants found Chili better than their own hearing devices.

For study details, please refer to Weile et al., "An Improved Option for People with Severe to Profound Hearing Losses", published in Hearing Review in September 2011.

Tools for constructive dialogue

Success with super power solutions depends to a large extent on the dialogue between hearing care professional and end-users, as their needs are more complex and their sensitivity to the accuracy of the fitting is much higher.

To help the hearing care professional enter a constructive dialogue with clients - and to help users glean maximum benefit from Chili - we recommended handing out the "My Chili Notebook". This encourages people to describe and reflect on the acoustic characteristics of the environments they encounter, situations they find particularly difficult, reactions from colleagues, friends and family, etc.



A recent case study reveals why users prefer Chili...

“A whole new life”

Following conversations. Playing the piano. Listening to music. Talking on the phone. Before he got Oticon Chili, 78-year-old Poul Andersen couldn't do any of these things. Today, it's a different story...

For more than 50 years, after becoming deaf in one ear, Poul Andersen managed to get by with one good ear. But six years ago the same condition that had erased half his hearing as a 20-year-old returned to claim his left ear, too.

“My hearing fluctuated for a while, then dropped drastically,” Poul recalls. “When I played a scale on our grand piano, some of the notes sounded very false, and the G and A tones sounded the same. Music started to sound like noise, and suddenly I couldn't recognise songs I used to know.”

Poul's hearing deteriorated to such an extent that he was unable to communicate other than in short sentences. “I couldn't listen to the TV or talk on the phone. And when I went to the bank or to the doctor, my wife had to act as my interpreter. I began avoiding social contact for fear of not being able to keep up. I could see people were talking, but I couldn't understand what they were saying. It was like living in a bell jar,” he says.

Unexpected improvements in understanding

When Poul upgraded to Chili, the improvement was immediate. “My previous instruments were turned up so high, they just sounded distorted. They also howled a lot. But this doesn't happen with Chili. The sound quality is far clearer and more detailed than before. It just goes to show how important it is to have the right hearing aid,” he says. “You will hear much more with a good instrument than a bad one. Your brain gets more stimulation - that's the only way I can explain this improvement.”

A miraculous return to music

The improvements don't stop there. While Poul's ability to communicate improved quite quickly, making progress with his music took time. “I kept on practising, and music is now sounding the way it used to. On the piano, a scale sounds like a proper scale. I still sing out of tune sometimes - but I believe that if I persevere, I will be able to correct that too,” he says. “Making music has been such a huge part of my life, and winning back that ability is like a miracle.” Rather than sitting in silence on trains and buses, Poul now listens to music from his MP3 player with the aid of the Oticon Streamer - effectively turning his Chili instruments into a wireless headset. “I can even get the sound from my electric piano and keyboard sent to my hearing aids without whistling or inappropriate volume shifts,” says Poul. “So the pleasure of hearing and making music has really returned.”



"Making music has been such a huge part of my life, and winning back that ability is like a miracle."

Easing his wife's burden

In helping Poul hear much better, Chili has also eased the pressure on his wife Ruth. "My wife no longer has to act as my interpreter when I visit the bank, post office, doctor, or other places. And now that I can use the phone, she no longer always has to do the talking," Poul says. "And the fact that she no longer

has to repeat everything - or write messages on paper - also makes life easier."

When asked what he might be looking for in a new instrument, Poul replies: "I can't think of anything that I'm missing. Chili has made such a huge improvement that it's given me a whole new life. That is no exaggeration!"

People First

People First is our promise
to empower people
to communicate freely,
interact naturally and
participate actively