

Oticon's BrainHearing™ approach

Giving your child's developing brain what it needs



Hearing is a big part of your child's development

It is often said that young children's brains are sponges, constantly learning about how the world works simply by being part of it. One of the most important sources of information for your child during crucial stages of natural development is sound. Sound allows us to learn to talk. It allows us to have conversations, to express needs and wants, to connect with others - to discover the power of communication.

Sound is the basis for a very early connection between the newborn and the parents. Sound is the foundation for reading and writing. Sound allows for the enjoyment of music.

Sound teaches us about the sometimes subtle relationship between sound and what is going on all around us. Footsteps tell a baby that a parent is approaching with a bottle. Laughter tells the toddler that something funny just happened. Traffic noise reminds the young child to be careful while playing outside.





What happens when a child has hearing loss?

- Only some parts of the speech signal get through to the brain.
- What does get through is often distorted.
- Noise creates much greater disruption than for children with normal hearing.
- Many of the softer sounds in the child's world (footsteps, distant voices, nature sounds) are totally missed.
- It takes more effort to follow what is being said as the brain has to fill in the blanks.

Although hearing loss happens in the ears, the real effect is in the brain





It is the brain that makes sense of sound

Children are learning all the time, from day 1

Getting hearing aids fit as soon as possible is essential as children are ready and willing to learn tremendous amounts about the world even from a very, very early age.

The brain must be stimulated to develop

Learning means that the brain is actually changing, becoming better organized. In so many areas, sound that is consistent and clear plays a big part in that learning.

Learning to talk is based on what the child hears

The full spectrum of sound is needed to allow for the best spoken language development.

Having hearing loss can be exhausting . . . it takes more effort to listen

The brain needs the most complete, clearest signal possible in order to easily understand what is being said.

It is essential that hearing aids are worn and functional all of the child's waking hours

If the devices are not worn or not working, the brain is not receiving the vital sound input it needs to continue to develop.

**How can technology help
your child develop as
successfully as possible?**





Children have to be able to count on their hearings aids:

- To provide the right sounds
- To process speech in the clearest way possible
- To be working all of the time

BrainHearing technology: Providing your child the best opportunity to get the most out of their hearing

BrainHearing technology:

Processes speech in the smartest way possible

- **MoreSound Intelligence™** makes it easier for the brain to separate sounds and focus on what it important
- **MoreSound Optimizer™** provides the brain with more access to speech throughout the day while preventing hearing aids from whistling
- **MoreSound Amplifier™** helps maintain the fine contrast and balance between sounds to make it easier for the brain to recognize

Provides a full range of sound

- **Extended bandwidth** provides access to the full pitch range of speech, especially the important higher frequencies
- **Capturing sounds at all levels** provides access to speech from even soft-spoken talkers

Delivers sound without interruption

- **LED indicator light** provides you, teachers and caregivers immediate, visual confirmation of the status of the hearing aids
- **Robust pediatric design** stands up to a child's active life





Give your child's developing brain what it needs

Your child's hearing is as unique as a fingerprint. Everything about their hearing aids needs to match his or her hearing, listening needs and lifestyle. Oticon's BrainHearing technology provides consistent sound processing that is matched to your child's needs at every stage of development.

As communication skills improve, all areas of your child's life can be positively affected, including school performance, social relationships and even the feeling of self-esteem.

Research supports Oticon's speech processing approach for children

- Independent research has shown MoreSound Intelligence promotes participation and communication access in everyday listening environments.

Gordey, D. & Ng, E. 2021, Oticon Play PX: Supporting Communication, Learning and Inclusion for Children and Teens, Oticon Whitepaper

- A new clinical study examining voice emotion recognition abilities of children using Oticon hearing aids with MoreSound Intelligence have similar performance to their age-matched peers with normal hearing.

Gordey, D. 2022, Case Studies with Oticon Play PX: Exploring New Domains in Pediatric Amplification, Oticon Whitepaper

Oticon Play PX, Opn Play™, and Xceed Play hearing aid families are developed specifically for children





Oticon EduMic

Oticon EduMic, our latest wireless remote microphone system, works hand in hand with Oticon Play PX, Opn Play, and Xceed Play to help overcome everyday listening challenges experienced in modern learning environments.

