

OtiKids



Family Notebook

A support guide for families with children who use hearing aids

oticon
PEOPLE FIRST

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This Family Notebook belongs to:

Child's name: _____

Parents names: _____

Hearing care provider's name: _____

Phone number: _____

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Introduction

The early years of a child's life are both magical and challenging, all the more so if a child has a hearing loss.

That is why Oticon has written this practical guide for parents and other adults involved in the care and education of the child, to assist them in helping the child adjust successfully to their new, and perhaps first, hearing aids. Children can't always express themselves clearly, and they often do not have all the skills needed to tell us exactly how well, or poorly, a hearing aid performs for them.

For this reason, your hearing care provider needs your help after your child has been fitted with hearing instruments. Your observations and comments in this booklet will provide feedback to them, help them adjust your child's hearing aids if needed, and ensure that your child is adjusting well to them.

Your child's best helper

You know your child best. Your rapport with your child will let you know how he/she feels about or

reacts to new situations, like getting new hearing aids.

To ensure that the hearing aids are correctly tuned, you need to tell your hearing care provider how your child responds to a few specific situations after he/she has been fitted.

The Family Notebook tells you which situations need your special attention and how to rate your child's response. Next time you meet you'll talk about your observations and decide if the hearing aids need adjustment.

A helping hand, not a test

The Family Notebook is not a test. It is made to help your child and you adjust successfully to the hearing aids, and help your hearing care provider tune the hearing aids to your child's needs.

The Family Notebook is intended for children in their early developmental years, from children uttering their first sounds to curious school children exploring the universe. So you may find some questions more relevant than others. Don't hesitate to ask your hearing care provider if you are in doubt.

How to Use the Family Notebook

Read, watch, listen and make notes

How you use this notebook may vary depending on whether your child is receiving his or her first hearing aids, or replacing old ones with new models. Even if your child is an 'experienced' hearing aid user, the new aids probably have different features and functions, and your observations are still valuable. We encourage you to read through the whole notebook to familiarise yourself with the observations we would like you to make. In the beginning, just watch how your child acts with his/her new hearing aids. Talk about your observations with your spouse or other adults who know your child - such as a teacher or other caregiver. And remember - relax. Things may change as your child reacts to and learns his/her new world of hearing. That's why the notebook is divided into three sections to cover the first few weeks and months of wearing and adapting to the hearing aids.

Section 1, Getting started and initial adjustment.

Your basic initial observations of your child's comfort and acceptance

of wearing the new hearing aids are critical at this stage. In addition, we'd like you to get accustomed to knowing the basic care and checking the function of the hearing aids. In most cases, these observations should be completed within the first two weeks of getting the new hearing aids.

Section 2, Experiencing sounds

Our goal is to give your child the amplification best suited for him/her. To do this, we need input from you about how your child reacts to everyday sounds around him/her, loud and soft, high and low pitched.

Section 3, Changes in speech and language

After your child has adjusted to wearing the hearing aids, and is wearing them full-time, you may observe changes in the amount, quality and clarity of sounds or words he/she produces; there may be changes in his/her understanding of spoken language as well. Your child's ability to produce and perceive certain speech sounds may be dependent on how the hearing aids are adjusted.

I. Getting Started and Initial Adjustment

The more you know about how to care for your child's hearing aids, the more he/she will benefit. You will most probably have to take care of the aids at first. As your child grows older, he/she will increasingly learn more of the tasks.

Since your child may not always tell you if the aids aren't working, we recommend you follow this simple daily routine:

- Listen to the hearing aids, to make sure they are working properly. An easy Listening Check procedure is provided on pages 10-11.
- Check that the earmould and tubing are clean and unclogged.
- Open the battery drawer at night to air out the hearing aids.



Whistling

Hearing aids whistle occasionally. This is called acoustical feedback and occurs when the amplified sound from the hearing aid leaks out of the ear to reach the hearing aid microphone. It can happen for a number of reasons, for instance when you hold your child very closely. Don't stop hugging, just change the position of your child's head - or maybe you'll have a special 'whistle-hug' to share between just the two of you! The whistling should stop. Wearing hats or bicycle helmets may also cause occasional whistling.

Note: Hearing aids should not whistle much during normal usage. If they do, contact your hearing care provider as soon as possible so the problem can be solved. Also see the Troubleshooting Guide on page 30.

How to Care for the Hearing Aids

1.a Do you know how to:

Yes No

- | | | |
|--|--------------------------|--------------------------|
| Put the hearing aids and earmoulds on your child? | <input type="checkbox"/> | <input type="checkbox"/> |
| Differentiate between right and left hearing aids? | <input type="checkbox"/> | <input type="checkbox"/> |
| Differentiate between right and left earmoulds? | <input type="checkbox"/> | <input type="checkbox"/> |
| Turn the hearing aids on and off? | <input type="checkbox"/> | <input type="checkbox"/> |
| Change the batteries? | <input type="checkbox"/> | <input type="checkbox"/> |
| Check the batteries? | <input type="checkbox"/> | <input type="checkbox"/> |
| Clean the hearing aids? | <input type="checkbox"/> | <input type="checkbox"/> |
| Check and clean the earmoulds? | <input type="checkbox"/> | <input type="checkbox"/> |
| Re-attach cleaned earmoulds back onto the hearing aids? | <input type="checkbox"/> | <input type="checkbox"/> |
| Check the tube between the hearing aid and the earmould? | <input type="checkbox"/> | <input type="checkbox"/> |
| Adjust the volume controls (if there are any)? | <input type="checkbox"/> | <input type="checkbox"/> |
| Change the switch position (e.g. 0-M-MT-T) for telecoil, and any other special uses (e.g. FM devices, Direct Audio Input)? | <input type="checkbox"/> | <input type="checkbox"/> |
| If provided, do you know how to use the clean and dry kit? | <input type="checkbox"/> | <input type="checkbox"/> |

1.b Do the hearing aids often whistle when your child is wearing them?

- Yes, the left hearing aid often whistles
 Yes, the right hearing aid often whistles
 No

1.c Does your child detect or react when the aids whistle?

- Yes No

1.d What do you do to reduce the whistling when the aids whistle for more than a few seconds?

✓ Spot Check

I am comfortable with my ability to handle the hearing aids.

- Strongly agree Agree Neutral Disagree Strongly disagree

Willingness to Wear Hearing Aids

Put yourself in your child's place. You're a kid and you have to start wearing some kind of "things" in your ears. Then, imagine suddenly hearing sounds that you've never heard before, or hearing sounds you used to hear differently. The experience can be exciting, confusing, and even a bit tiring.

Remember, this is very new to your child and one way to gain acceptance is to assure that your child's first experience with hearing aids is positive. For instance, make sure that the first sounds your child hears with the new hearing aids are familiar, comfortable sounds such as family voices and music.

One of the subjects that will be discussed at your follow-up appointments will be how often your child wears the aids. Age and the degree of your child's hearing loss are often factors in how easily and quickly your child adjusts to wearing his/her hearing aids.

If your child does not want to wear the hearing aids

Sometimes a child may not want to wear hearing aids. There are many reasons for this.

The most common ones are:

- The sounds are unfamiliar and it may take time to learn to listen to them.
- Your child doesn't like the feeling of the hearing aids inside the ear canal.
- Your child feels embarrassed or self-conscious about wearing hearing aids.
- The earmoulds are tight or uncomfortable.
- Sounds may be too loud.
- The hearing aids aren't providing sufficient amplification.
- The hearing aids whistle a lot.



How to perform a listening check of your child's hearing aids

You'll need a stetoclip or listening tube, which allows you to listen to the hearing aids without putting them in your ear. Ask your hearing care provider for a 'damped' steto-clip or listening tube if your child's aids are powerful to prevent the loud amplification from being uncomfortable to your ears.



1. Turn the hearing aid off, to "O" (if the model does not have an "O" position, then open the battery door).



2. Place the listening tube securely in your ear canal.



3. Attach the listening tube to the hearing aid. If you are listening to an in-the-ear (ITE) style, simply attach the listening tube to the sound outlet end of the ITE aid, instead of the end of the earmould as shown.



4. Turn the hearing aid on, to "M", microphone; there should be no crackling noises as you move the switch. Models without an "M" switch can be turned on by closing the battery door.



5. If the hearing aid has a volume control, turn the volume up and down. There should be no crackling noises as you turn it up and down.



6. Hold the hearing aid out in front of you but not too close to your mouth. Listen for the clarity of these sounds as you say them aloud: “AH” as in **f**ather; “EE” as in **b**ee; “OO” as in **m**oon; “SH” as in **s**hoe; “SSS” as in **s**un; and “MMM” as in **m**other.



7. If your child uses the telecoil position you can also perform a listening check of this. Switch the aid into the “T” (or “MT”) position.



8. Next, hold the hearing aid near a television set that is turned on. You should hear a buzzing noise, which confirms that the telecoil is working.

If you suspect a problem with the hearing aid, review the Troubleshooting Guide on page 30, or contact your hearing care provider.

Section 2: Experiencing Sounds

Sounds perform many useful purposes. They:

- Inform (the doorbell or the telephone ringing).
- Alert us to danger (horns and sirens).
- Create atmosphere or help us perceive space and depth (people talking around a table, birds singing, running water, etc.).
- Help us communicate.

Now that your child is wearing his/her hearing aids on a regular basis, you may start observing his/her auditory behaviour, that is, listening and responding to sounds around him/her. To what degree these changes occur will depend on the child's age, degree of hearing loss, previous hearing aid use (if any), and any other short-term or ongoing conditions (e.g., recurring middle ear infections, extended illnesses, learning delays).

With your help your child may explore new sounds heard with their new hearing aids. He or she will probably hear sounds that are loud, like a low flying jet or a vacuum cleaner. Other sounds may be so soft that your child may not

hear them at all, even with the best of aids.

Your child may react differently to sounds that are low, mid and high pitched. Some ranges of pitches (frequencies) may be easier to hear than others, depending on your child's hearing loss. For example, low-pitch sounds such as a vacuum cleaner or traffic may be easier to hear compared to high-pitched sounds such as birds singing or a violin playing.

At first, young children may not overtly react to the new sounds from the new hearing aids. The more they wear their hearing aids and listen, the more benefit they'll get from them. It's a matter of adjustment and learning to listen.





Your hearing care provider's challenge is to give your child the amplification best suited for him/her. To do this, he/she needs input from you about how your child reacts to everyday sounds:

A crowd of talking people. A busy street full of traffic. Clattering dishes. Birds chirping in the trees. Children laughing. Cash registers in the grocery store. There are a variety of sounds, soft, moderate, and even loud, all around us.

2.a Does your child react to loud sounds?

- Yes, he/she reacts to: _____
- No

2.b If yes in 2a, how does your child react to loud sounds, does he/she?

- Become startled Cover his/her ears
- Jump up Make faces
- Turn his/her head to look for the sound
- Turn his/her head in the direction of the sound source

Please describe other reactions, not listed here: _____

The Listening Bubble Effect

Hearing is a sense that involves not only the loudness and pitch of sounds, but also distance or range. A child with a hearing loss will have a reduced hearing range, or a smaller listening bubble, than a child with normal hearing. When you are in another room, you are using your hearing range, or have a listening bubble that includes hearing sounds of that loudness, frequency and distance. People with hearing loss have smaller listening bubbles.

How well young children with hearing loss function varies between individuals and typically shows some improvement with more listening experience. Hearing aids will improve the size of the child's listening bubble. By using amplification during all waking hours, auditory skills will usually improve over time, including how well a child is able to use sound for speech and verbal language.

The "Listening Bubble Effect",
by Karen L. Anderson, Ph.D., 2002.



This photo shows a situation where the adult is clearly within the young child's listening range - increasing attention and comprehension, as well as providing important visual cues.



In this photo, the adult may be out of the child's listening range. Be aware that other sounds in the environment may also compete with the child's awareness and the perceived loudness and clarity of the speaker's voice.



The size of a child's listening bubble is based on his or her degree of hearing loss and consistent, daily use of amplification. Get into your child's hearing range!

Playing and Communicating

Is it easier to communicate with your child after getting the new hearing aids? A good time to evaluate your child's ability to communicate is when playing or doing some other activity together.

Communicating with children often involves getting and keeping their attention as well as turn-taking. For older children, communication is more sophisticated. They must focus on, and understand, what you are telling them in order to answer your questions.

When trying to communicate with your child it's a good idea to face him/her and have eye contact. The child receives information not only from the spoken word, but from your lips, eyes, facial expressions and body language as well.

It is important to get the child's attention and make him/her ready to listen before you speak. This can be done e.g. by calling out his/her name.



Sound advice for communicating with children

Distance and background noise make it more difficult for children to hear and understand, even for children with normal hearing. Therefore, when you communicate with your child try to remember some basic rules, which will help your child understand and develop speech better.

1. Always face your child when speaking, preferably within 1-3 meters. Keep your face in view. If you stand where your face is well lit, it makes it easier to see your facial expressions and read your lips.
2. Try not to talk while chewing food. This makes it difficult to understand what you are saying, and almost impossible for others to read your lips.
3. Don't lean with your face on your hand, or sit behind a newspaper when talking, since this makes the transmission of sound as well as lip-reading difficult.
4. Try to minimise the distance between you and your child when speaking. Consider the size of the "Listening Bubble" or range of hearing for ideal reception of speech sounds by your child.
5. Try to avoid or reduce background noise when talking to your child as it can be difficult for him/her to discriminate your voice from the noise. Turn off the television and close any open windows to muffle any noise from traffic. Either move closer to make your voice louder than the background noise, or try to find somewhere quieter to talk.
6. Speak clearly, at a normal pace. Ensure that you have your child's attention and avoid a monotone voice but vary your pitch while speaking. If your child does not understand you, don't raise your voice. This may make your voice uncomfortable, distorted, or even painful. Instead, try getting closer to your child, rephrasing your words or speaking more slowly.

For more information please also refer to Oticon's booklet Good Communication Habits.

Make sure the volume controls (if there are any) on your child's hearing aids are set to the recommended level and the hearing aids are in working order.

2.f When playing with your child, is it easier to get his/her attention, for example when you call his/her by name?

Yes

No

2.g When you play together, is it easier to communicate with your child?

Yes

No

2.h When your child is alone, absorbed in a play activity, and doesn't see you, it may be more difficult to get his/her attention. In this situation has it now become easier to get his/her attention when you, for instance, call his/her name?

Yes

No

2.i When your child is playing with others, does he/she seem more alert and responsive to their voices?

Yes

No

2.j Have you noticed other changes in your child's behaviour in play and/or communication situations?

Yes

No

Please comment on your above answers:

✓ Spot Check

I am happy with the way my child is communicating.

Strongly agree

Agree

Neutral

Disagree

Strongly disagree

Section 3: Changes in Speech and Language

Children develop differently. Not all children acquire language at the same time or rate. Children's language develops, largely, as a result of hearing and stimulation. They listen to their parents, and learn their words. They also adjust their own pronunciation by listening to their own voice and comparing it to what they hear from others.

After the hearing aid fitting, your child may find that his/her voice sounds different, and he/she may react to this change. The quality of some children's voices or babbling and which sounds they have might change with new hearing aids. Others talk more because they find it amusing to experiment with their "new voice".

Another aspect of developing language is understanding what is said. The degree of a child's loss, age at which the hearing loss occurred, age when first using amplification and (re)habilitation has a strong impact on the degree of the child's progress in developing speech and language.

Remember that changes in speech production and understanding occur over a period of time. Your child's speech/language therapist can advise you of what changes and progress you can expect with your child.

It is important to find out if your child can use these new, amplified speech sounds, including the sounds of their own voice. A child's reaction gives your hearing care provider important information regarding the adjustment of the hearing instruments.



3.a Is there any change in how much your child speaks (or babbles) now that he/she has been fitted with the new hearing aids?

- Yes, my child speaks more than before
- Yes, my child speaks less than before
- No difference

3.b How is the loudness of your child's speech?

- It seems like my child speaks softer than before
- It seems like my child speaks at an appropriate level
- My child often speaks more loudly or shouts

3.c Have you noticed any change in the kind of sounds that your child is using when he/she vocalises (babbles or talks)?

- Yes (examples) _____
- No

3.d Have you noticed any changes in the clarity or accuracy of the speech sounds that your child produces or imitates? For example, are some vowels or consonants more clear?

- Yes (examples) _____
- No

3.e Is your child better able to recognise speech sounds or words that are already familiar to them?

- Yes (examples) _____
- No

3.f Does your child seem more comfortable in following your speech/ conversation?

- Yes
- No

3.g Does your child seem more comfortable in following the speech/ conversation of friends or other caregivers?

- Yes
- No
- Don't know

Please comment on your above answers:

✓ Spot Check

I am happy with the way my child vocalizes.

- | | | | | |
|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| Strongly agree | Agree | Neutral | Disagree | Strongly disagree |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |



For other Caregivers

Your child will probably be very active outside the home, at a day-care centre, playgroup, school or with friends and relatives.

Those responsible for caring for your child away from home can give you valuable information about your child. In many cases they may be willing to give special attention to how your child is reacting to the new hearing aids.

Ask them if they could help you by answering a few questions. It's a small favour to ask, but will be a big help to your hearing care provider in evaluating the performance of the hearing aids.

Name of person observing child:

Relationship to the child:

Hours spent per week with the child:



3.h Does the child willingly wear the hearing aids?

Yes

No

3.i Are there certain times or situations when the child prefers the aids off or out of their ears?

Yes _____

No

3.j Is it easier to get the child's attention, i.e. by calling his/her name, with the new hearing aids?

Yes _____

No

3.k When you have the child's attention (for instance, when playing together), has it become easier to communicate with him/her?

Yes

No

3.l Are there any particular sounds in the environment that the child now reacts to with the new hearing aids?

Yes _____

No

3.m How is the loudness of the child's speech?

It seems like the child speaks softer than before

It seems like the child speaks at a more appropriate level

The child often speaks more loudly or shouts.

3.n Have you noticed any new sounds or words the child is using when babbling or talking?

Yes _____

No

3.o Have you noticed any change in the child's behaviour in play situations and/or when communicating with him/her?

Yes _____

No

Hearing Aid Use and Response Log

(M. Peters, C. Borders & G. Snell; Vanderbilt Bill Wilkerson Center, Nashville, TN, USA)

The form below is designed to help parents and caregivers observe the child’s initial hearing aid experiences. This is especially useful with young children being fitted with hearing aids for the very first time.

Your observations of your child’s behaviour and responses to different sounds in the home environment are very important for the educational audiologist or hearing care provider. They can use this information to help determine how well your child is adjusting to hearing amplified sounds; the benefit and appropriateness of the amplification; and the need for any fine tuning.

Day/Date	Time (e.g., 4-5 pm)	Type of Environmental or Other Sound (e.g., vacuum cleaner; kitchen sounds; music; listening to a story; watching TV/video; noisy toy; mealtime conversation; traffic)	Observed Response (e.g., calming; excited; fearful; distressed; crying; awareness; turned or moved to sound; change in facial expression; touched ears; change in activity level; pleasure)	Comments/Problems (e.g., removed hearing aids; covered ears; whistling; child was tired)

Hearing Aid Trouble Shooting Guide

Problem	Reason	Solution
<i>No Sound</i>	Dead battery	Change battery
<i>No Sound or only buzzing</i>	Switch in wrong position	Switch to M-position
	Clogged sound channel	Clean earmould
	Volume is turned down*	Turn up volume control
<i>Whistling</i>	Volume too high*	Reduce volume (temporary solution) and contact your hearing care provider
	Clogged sound channel	Clean earmould
	Ear wax in the ear canal	Contact your hearing care provider
	Stiff earmould tubing	Contact your hearing care provider to change it
	Earmould is too loose	Contact your hearing care provider
	Hearing aid/earmould not correctly placed in the ear canal	Re-insert hearing aid/ earmould
<i>Poor sound quality</i>	Microphone dysfunction	Contact your hearing care provider

Hearing aids should not whistle too much. Do not hesitate to contact your hearing care provider if you need any kind of assistance or advice.

Notes:

**) Some Oticon hearing aids have automatic volume controls and no external switches to adjust. Other aids have tamper-resistant volume control covers that prevent children from inadvertently changing the settings.*

Photos: Tripod School, California, USA and Børnehuset Nyrup, Denmark.

www.otikids.com

The OtiKids website is designed to provide comprehensive information for parents and teachers of children with hearing impairment. The site addresses the physical, social, and psychological aspects of hearing loss as well as the process of obtaining hearing aids. Topics include the following:

- Understanding - reviews how the ear works, hearing loss and its causes.
- Concerns - discusses how a hearing loss may affect a child socially, academically, and communicatively.
- Helping - provides an overview of the process for obtaining hearing aids.
- Networking - provides questions and answers, collection of links, recommended reading, and Oticon worldwide subsidiaries.
- Solutions - lists current Oticon products relevant to children.
- Kids Corner - A section especially for children, including explanations about hearing loss, personal stories by hearing-impaired children, and fun games.





People first



We believe that it takes more than technology and audiology to create the best hearing instruments. That's why we put the individual needs and wishes of hearing impaired people first in our development of new hearing care solutions.