



Northeast Rehabilitation Hospital Network

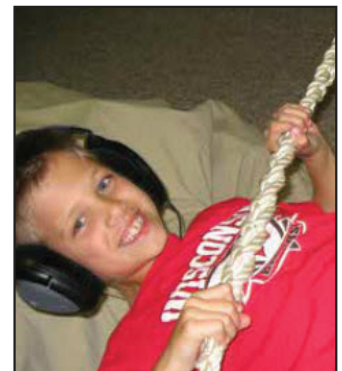
Pediatric Therapeutic Listening A Guide for Families

What is Therapeutic Listening

Therapeutic Listening is an “evidence-based auditory intervention intended to support individuals who experience challenges with sensory processing dysfunction, listening, attention and communication” (Vital Links). This program uses music that is electronically altered to elicit a specific response.

Therapeutic Listening can address:

- Poor Attention
- Difficulties interacting with peers and limited play skills
- Challenges with transitions or changes in routine
- Difficulty communicating (both verbal and non-verbal)
- Struggles with sleep, bowel and bladder control, and eating
- Trouble following directions
- Challenges perceiving and navigating space
- Poor timing and sequencing of motor skills
- Difficulties with regulating their every level i.e. low arousal or hyperactive
- Difficulties with irritability or mood
- Postural insecurity (fear of heights, playing on playground equipment)
- Abnormal responses to various sensory stimuli (sounds, touch, taste, pain)
- Poor praxis and motor planning
- Difficulty responding to sounds and verbal directions



PEDIATRICS PROGRAM
BUILDING FUNCTION WITH FUN!

**Northeast Rehabilitation
Hospital Network**
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Pediatric Therapeutic Listening

How does this therapy work?

Special music is the key.

Songs of all kinds are used.

Children wear special headphones that play special music that has been “filtered” or modified in order to expose the nervous system to “low sounds” (below 1,000Hz, related to vestibular and postural functions), “mid-range sounds” (1,000-4,000 Hz, related to key speech sounds), and “high sounds” (>4,000Hz, related to attention, discrimination, and emotional functions) at various times throughout the music track. Music selections range from nursery songs to nature songs, classical songs, and pop songs.

The program uses sound to address functional goals such as improved engagement, social participation, self-regulation including biological rhythms (i.e. bladder/bowel control, sleep/wake cycles, hunger/fullness) ability to tolerate transitions, communication, learning/academic performance, attention, self-help skills, tolerance for new foods and clothing textures, and even improved handwriting.



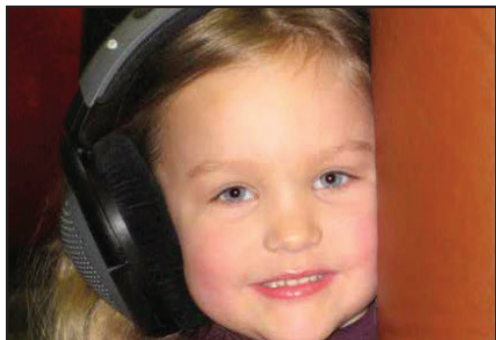
What role does the ear play?

The function of the ear is to feel and hear sounds and movement. It is referred to as the vestibular-cochlear system. The cochlea is the part of the ear that is our hearing sense organ, responding to minute vibrations and differences in sound waves. The vestibular portion of the ear detects movement of the head in space. It is considered the organizer of our body senses. It is our internal ear, allowing us to understand time and space from our body’s perspective. It has a

strong impact on muscle tone, posture, balance, coordination, integration of the two body sides, visual spatial skills, emotional responses and motor-planning. Therapeutic Listening treatment stimulates and exercises the vestibular-cochlear system. It is designed to enhance the accuracy of the sensory information sent from the vestibular-cochlear system of the ear to its multiple connections throughout the nervous system. This program works best as part of an overall sensory program/OT treatment plan.

Therapeutic Listening capitalizes on the organized rhythmical sound patterns inherent in music to trigger the self-organizing capacities of the nervous system.

Pediatric Therapeutic Listening



Is this therapy right for my child?

Children challenged with the following may benefit:

- SPD
- Autism/Asperger's
- Developmental Delays
- Down Syndrome
- CP
- ADD/ADHD
- Anxiety disorders
- Poor executive functioning skills
- Poor FM and VM skills

What is the Cost?

- Initial evaluation: \$150 fee for introduction to Therapeutic Listening, assessment of child's areas of needs/concern, trial with child, determination of 1st MP3, headphones and education for parents
- Follow up appointment: \$50 fee for service and MP3 player/MP3 rental. Appointments run about 15 minutes. Parents return old MP3 and exchange for next one.
- A deposit is required for MP3 player/MP3 rental. It is refundable once program ends.

General Guidelines

- Your child should listen to their CD for 20-30 mins (depending on the music Selection) 2 times per day, 7 days per week
- Minimum separation of 3 hours between listening sessions
- Listen only through designated headphones (unless child is 2 and under)
- Parent should place headphones on themselves first before each session to check volume and function
- Listen at a quiet to comfortable volume (child should be able to hear you talking and not be talking loudly while listening)
- Use the random/shuffle mode to keep the music novel
- Your child should be engaged in active activities while listening. Do not participate in activities such as TV, videos, computers/IPads, sleeping while listening
- Often, parents report their child becomes "worse" when they start the program. This is common and is referred to as a "period of disorganization followed by reorganization", as the nervous system reorganizes itself. Be sure to speak with your therapist if this happens.
- Music selections are changes/adjusted every 2-4 weeks depending on response and progress
- If your child has an active ear infection or other illness:
 - Resume listening after child has been on medication for active ear infection for 24 hours
 - Resume listening after flu or temperature symptoms clear up
 - Able to continue with listening if cold symptoms are present
- If your child has hearing aids:
 - Remove hearing aids prior to listening
 - Keep volume at normal conversational level
 - Unilateral loss – use a stereo volume control to equalize volume in both ears