

PRACTICE



Visit the new Infant and Toddler Section at
The Listening Room at
www.hearingjourney.com



0 to 6 months

This Listening Room is a steady stream of FREE activities and resources to support the development of speech, language and listening skills of children, adolescents and adult cochlear implant recipients.

Music developed by Chris Barton.

Why Babies Need Music

BY CHRISTINE BARTON, MM, MT-BC

Once upon a time, a very long time ago, a new mother gazed into her baby's eyes and began to sing. Why? Because she quickly learned that singing helped to calm her baby, capture its attention and forge a bond so strong as to be nearly unbroken. What she probably didn't realize was that it would also help her baby's ability to acquire spoken language later on. Scientists now refer to this kind of sing-song communication as Infant Directed (ID) singing or speech. You may recognize it by its common name, motherese. It is characterized by a higher than usual pitch, slower tempo and an emotional expressiveness. Studies show that babies prefer this kind of communication over typical adult speech. It is not only mothers who engage in ID singing, but fathers as well. In fact, this behavior occurs universally among caregivers!

We also know that for an infant, its primary response to rhythm is movement. Isn't it interesting that when we hold an infant we begin to rock or bounce, thus reinforcing that response? There is evidence to suggest that a strongly metric rhythm actually induces an internal clock in infants and that they can discriminate when that rhythm changes. This is important for developing the ability to synchronize movements to an external source, such as a piece of music.

Babies are also able to recognize a melody sung at a different pitch as long as the relationships between the tones are unchanged. It's notable that when mothers sing to their infant, they tend to use the same

tempo and pitch over extended periods of time.

One crucial function of ID singing is its ability to teach infants about auditory patterns like phrases, rhythm and grouping. This is critical to developing the processing skills needed to decode speech.

But what does this mean for our infants with a hearing loss? Research has demonstrated that when a hearing mother first discovers that her infant has a hearing loss, she will increase her use of vocal range, but over time this fades. In a study conducted by the Department of Otolaryngology at the Indiana University School of Medicine (Bergeson, Miller & McCune), researchers discovered that hearing mothers of an infant with a cochlear implant used typical ID style when communicating with their child. They also adjusted their vocal style to match the hearing experience rather than the chronological age of the child. This is good news, indeed, because of the critical link between ID singing and the development of language, speech discrimination and cognitive skills. The current technology that enables early identification of hearing loss affords us the opportunity for early intervention. A natural part of that intervention should include ID singing.

So, bounce, rock, and SING to your baby!!

Reference:

Bergeson, T. R., Miller, R. J., & McCune, K. (in press). Mothers' speech to hearing-impaired infants and children with cochlear implants. *Infancy*.

TuneUps Wins 2009 Therapy Times Most Valuable Product Award



MVP 2009 Winner: Advanced Bionics' TuneUps®

Developed by music therapist Chris Barton and speech therapist Amy Robbins, this music CD and habilitation program engages children in a listening, language, and learning experience.

Links

Therapy Times Newsletter July 20, 2009:
<http://www.therapytimes.com/content=0302J84C48769286406040441/#speech>

Advanced Bionics, Hearing Journey, TuneUps:
http://www.hearingjourney.com/Listening_Room/Kids/Tune_Ups/index.cfm?langid=1



Chris Barton

is in private practice and works at the St. Joseph Institute for the Deaf. She is also the composer and co-creator, with Amy Robbins CCC-SLP, of TuneUps, the 2009 Award-Winning CD for children with cochlear implants.

Contact: cgbarton@scbgloabl.net