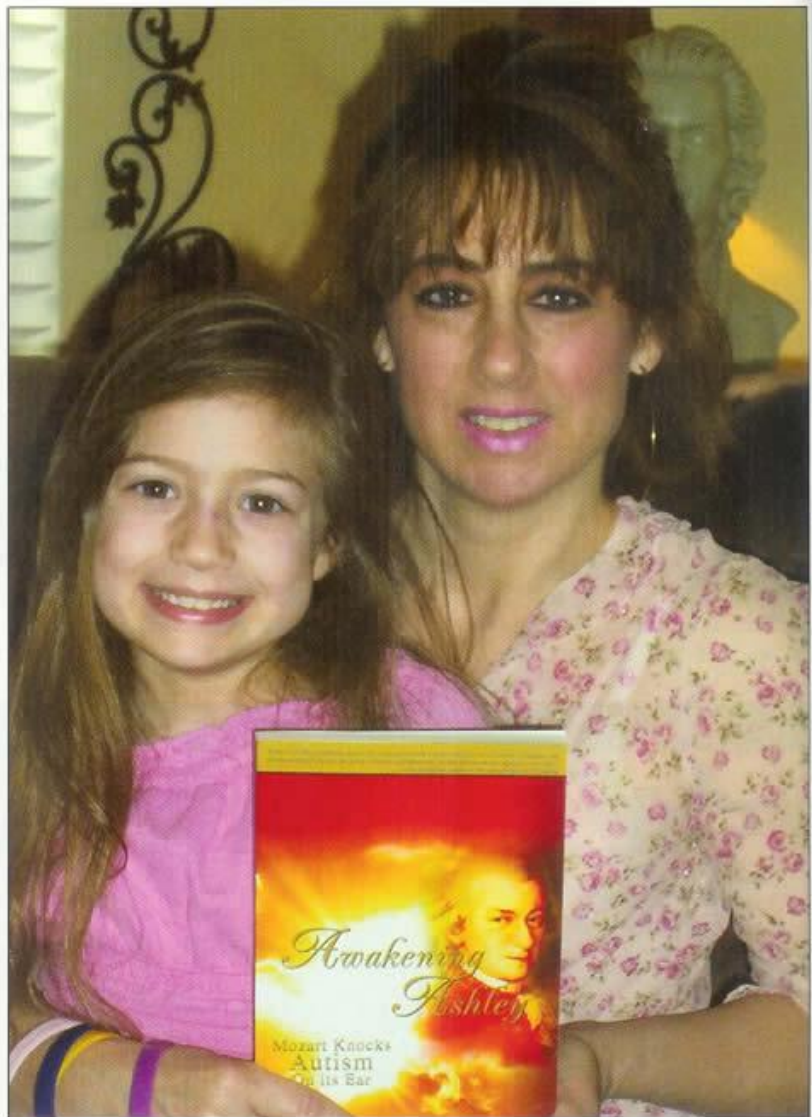


All One Girl Needed In Her Struggle with Autism Was Help From Mozart!

Is it possible to
recover from autism?



Author Sharon Ruben thinks so. Ruben is the mother of Ashley, a seven-year-old girl who is the subject of her book, *Awakening Ashley: Mozart Knocks Autism on its Ear*.

"Recovery is not out of the question for these children," remarked Ruben. "Let's not write them off so fast after that diagnosis punches us in the stomach. Early intervention is key."

Ruben reiterates these sentiments

during consultations with parents of children with autism across the country.

Ashley was diagnosed on the autistic spectrum at 21 months of age. Ruben said she was unable to speak or engage in any type of socialization; unable to point with no desire to hug or be hugged by her family.

"She would tune us out when you called her name," added Ruben. "She'd just kind of be in her own world. No one could capture her attention."

Only Barney the big purple dinosaur seemed to strike a connection with Ashley.

"All of a sudden my dreams for Ashley were gone. This diagnosis just snuffed out the future I envisioned her having," Ruben said.

Ruben was determined to find help for her daughter. She tried speech and occupational therapy, a gluten-free/casein free diet and FloorTime methods to

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teach Ashley two-way communication. Still her little girl was not progressing quite as fast as Ruben had hoped. Her words were not coming and she had no pretend play, characteristic of children on the autistic spectrum.

Enter Mozart and the Center for what would be Ashley's home-away-from-home for the next two years of her life and where she was introduced to Mozart and the Tomatis Method, a sound stimulation therapy that retrains the ear's natural ability to listen.

Dr. Alfred Tomatis, a French ear, nose and throat specialist, discovered that when our ears don't perceive all the frequencies of sound, our voice won't contain them either. Having blocked various frequencies from the ear of singers during his experiment, he noticed that their voices deteriorated; those blocked frequencies were no longer present in their voices. Realizing this, he thought if he could change the way someone hears, their voice would change as well. Thus, came the discovery that exercising the tiny muscles of the ear with sound would enable the ears to become stronger, better filters and able to perceive the spectrum of sound better, thus restoring the lost frequencies to their voice.

So what does Mozart music have to do with this and autism? "Everything," according to Ruben.

Ruben explained that Tomatis believed children with autism have underdeveloped inner ears that can be retrained through intensive sound therapy. The foundation for Dr. Tomatis' method of sound stimulation is based on the way a fetus hears in-utero. As the mother speaks, only the high frequencies of her voice are channeled through her skeletal system and picked up by the developing fetus. This is hearing through bone conduction and it's the only way a fetus can hear its mother's voice. Being able to hear these high frequencies, in essence, wires the fetus for



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language and prepares it to hear outside the womb once it is born. The Tomatis therapy is designed to replicate the sounds heard in-utero in order to reawaken the ear's natural ability to listen and ultimately stimulate the brain's desire to communicate.

In the absence of a "mother" for his experiments, Dr. Tomatis recreated the mother's voice for his subjects using Mozart music. Mozart, he found, was the best suited for simulating the developmental period of listening in the womb due to its high-frequency properties - those above 8,000 hertz. The low, draining frequencies are removed from the music, leaving just the high, energizing frequencies. High frequencies transmit

more auditory information to the brain, thereby stimulating it more. The music of other classical composers does not contain as many of the higher frequencies to their arrangements after this filtering process as Mozart does.

The Tomatis listening program at the Center is comprised of three 'loops,' with month-long breaks in between. The first loop is 15 days, the second loop is eight days, and the third loop is also eight days. Listening is for two hours each day.

During therapy, Ashley wore headphones that pumped in Mozart music. The music was gradually filtered over a period of several days until only the frequencies above 8,000 hertz remain. Once Ashley's ear had adjusted to listening to the high frequencies, a tape of her mother's voice was introduced that was also devoid of all frequencies below 8,000 hertz to simulate when Ashley was back in the womb.

In addition, Ashley's program also consisted of listening to Gregorian Chants, as they are more consistent with the rhythms of a relaxed respiration and heartbeat. After the first loop of listening to filtered music, Ashley's program graduated to the second loop and the de-filtering phase, whereby the low frequencies were returned to her music. This re-introduced her ear to listen in an air-conduction environment (outside of the womb).

Ashley's program included microphone work to hone her audio-vocal control in an air-conduction, non-liquid environment. By hearing her voice with the microphone work, she learned to develop a more accurate perception of her voice and ultimately improved control of it.

"The second day, I really remember," said Ruben. "We got into the car and we were driving home. All of a sudden Ashley said, 'I want cookie.' She'd never said anything spontaneous like that before. My husband and I just looked at each other and said, 'What did she just say?'"

As Ashley's brain desired to communicate, it fostered a connection with her body, her family and the world around her. According to Ruben, Ashley began eating new and different food, her lack of affection towards her family changed and she began to smile. She played "Duck, Duck, Goose" and "Simon Says" with her sister, social games Ruben thought Ashley would never be able to learn or participate in. She was even potty training from Tomatis now that she had a better sense of her body.

"Her motor planning greatly improved and she was now doing things for herself," said Ruben. "She was engaging and asking all sorts of wonderful questions. She was even telling jokes."

Sharon continued Ashley in the program after the third loop.

"I didn't want to stop a good thing," said Ruben. "I was seeing my non-verbal, non-social daughter awaken and come alive. I wanted to do everything to make it stick."

According to Ruben, after 150 hours of listening and nine loops later, Ashley was removed from the autistic spectrum by her diagnosing neurodevelopmental pediatrician.

Ruben recently appeared on the *Today Show* on NBC to discuss Ashley's progress.

"Ashley overcame more obstacles in those four years than most children will know in a lifetime," said Ruben. "I don't consider Ashley's recovery a miracle. This disorder can be battled and won. What's miraculous is that so many people in Ashley's life cared enough about her to help her find her way back. Ashley's future, once filled with murk and uncertainty, has never been more clear and full of promise." ■

Sharon Ruben is the recipient of EP's Maxwell J. Schleifer Distinguished Service Award. To learn more about the Tomatis Method, Ashley's journey or to contact Sharon, visit www.awakeningashley.com.



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When Kris came to Heartspring, mental retardation, CHARGE syndrome and sleep apnea affected even the most basic aspects of his life — he couldn't speak, maintain a proper diet, or even get a full night's rest. Now, buoyed by the expertise and encouragement of the Heartspring staff, Kris' achievements in each area make it possible for him to enjoy those simple things in life even more. Way to go, Kris.



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