



Connecting with your baby

Mother's body: a resonance chamber

Research into pre-natal life indicates that a foetus has an intensely active sensory and mental life. The first of the sensory experiences of the unborn child is that of vibration and sound. A baby starts hearing as early as 12 weeks in gestation.

Halfway through the pregnancy, it will be able to perceive the sounds of the mother's heartbeat, breathing and voice. Of course these sounds will be filtered by the amniotic fluid, but the baby will still be able to hear. Not just through the ears but with the whole body via bone conduction, with the skeletal system acting as a resonator. This is the beginning of listening.

"It is thanks to the voice of the mother that the desire to communicate is formed." Alfred Tomatis

Listening to the mother's voice creates the very first bond of communication with the world. The quality of this bond will deeply influence the child's attitude towards life. What the baby learns in-utero is an imprint of the mother tongue, the melody, and the intonation of her language, which besides the emotional impact also creates tremendous stimulation for the nervous system to grow, especially when her voice is rich in harmonics. It is all a process of learning and conditioning which will lead to real speech and understanding language. In fact it is the first stage of language development.

According to Rabel (1984) the foetus is responsive first to lower frequencies and then to higher ones. There is very little distortion of the mother's voice whereas other external voices and sounds are more muffled. That's important because the higher frequency sounds are related to cognitive functions such as thinking, spatial conception and memory. Listening to harmonious sounds especially in the higher frequency range increases our attentiveness and concentration, even in-utero.

The natural evolution of the human brain begins with an auditory nerve. Problems resulting from a lack of appropriate auditory input affect language recognition, thought, speech, overall neurological development, and functions ranging from balance to the formation of muscle tone. Only in recent decades have we developed an awareness of the importance of sound as a means to charge and develop the brain. In fact, the ear can be seen as a sort of dynamo; a place where sound is transformed into electrical pulses that fuel the developing nervous system of the baby.

The ear controls the body's sense of rhythm and movement. Through the medulla, the auditory nerve connects with all the muscles of the body. Hence muscle tone, equilibrium, flexibility and vision are affected. Through the vagus nerve, the inner ear connects with the larynx, heart, lungs, stomach, liver, bladder, kidneys, and the small and large intestines. Every bone, every organ, in fact every cell in our body has its own resonance frequency. When all is well, we literally live in harmony; just like each individual instrument in an orchestra, all organs in our body play their part. Listening Training uses music as a tool to stimulate the brain and help create or restore this harmony, for both mother and child.

Preparation For Giving Birth

Just as all of us have a different finger print, we also have our own characteristic way of 'tuning in' to what we like to hear and 'filtering out' what is hurtful to us. This is a protective mechanism, a subconscious process that we all go through in one way or another – even with the best of parents. Our desire to listen can be impaired in childhood or even in the womb. Mother and child are a unit and as such the 'disharmonies' in life may have an impact on both. Becoming a parent is a rite

of passage and not always easy. One of the benefits of the Listening Training is that it diminishes stress and anxiety and as such improves the quality of the pregnancy as a whole.

Frequently mothers, first time mothers particularly, can feel insecure. They wish with all their heart to be good mothers, but sometimes we have important issues to deal with ourselves before giving birth. While in the privacy of the sessions there is ample room to discuss these concerns. Yet, in many cases there is no need to talk much at all. Changes take place out of their own accord because the mother learns to literally be more in tune with herself just by (re)-training the ears. A good listening ability includes an objective perception without being overwhelmed, whereas poor listening skills can create a lot of confusion. What she will gain is awareness, trust and confidence, all keys to any change for the better. This implies re-directing focus, zest for life and a change in perception of self and others. Pregnant women who do the course of treatment feel relaxed and energized, even in those demanding last months of pregnancy. During the sessions they often report a great exchange with their baby. And for the children, Listening Training means a wonderful chance to start off in a richer, more harmonious world.

Listening: A Door To The World

The mother's voice, as perceived by the baby, awakens the baby's desire to communicate. It's noteworthy that most elements of language are present in music. Pitch, timbre, rhythm are all there. In a way you could say that music is a pre-linguistic phase of language. It is nourishing and stimulating and also creates an internal sense of beauty. British violinist Yehudi Menuhin – who was one of Tomatis' clients – believes that his own musical talent was partly due to the fact that his parents were always singing, and playing music before he was born. Tomatis was a pioneer in prenatal development and psycho-linguistics. Just like Leboyer and Odent and other medical professionals he promoted a gentle, non-interfering approach to birth. He developed a device – called the Electronic Ear – that trains the ears to optimal functioning. Specific sonic neuro-technologies - such as filtering and gating techniques - utilize the principle of resonance (the impact of one vibration upon another) Listening Training puts it all together. The system allows a personalised programme of filtered music (mainly Mozart and Gregorian Chant). Special headphones are designed for both air as well as bone conduction. This creates the most potent stimulation for the mother/baby unit. Nothing 'active' needs to be done. During the sessions clients can relax – they are invited to sit and draw, do puzzles or anything else that suits them. They can even go to sleep.

A Worthwhile Experience

Since mothers who do the Listening Training often feel relaxed and energized the actual process of giving birth is optimized. Comparative studies in two French hospitals (Foch and Vesoul) have shown that with Listening Training the average time of labour was shorter, fewer women had to be induced and there was a reduction in the number of Caesarians from 15% to 4%. More recent American studies support Mozart's positive effect on spatial and mathematical intelligence. And there is a growing consensus about a powerful connection between sound/music and prenatal memory and learning in general. What else can one say? Ah, yes: 'Tomatis babies' are also known to be more inquisitive, more aware and 'toned' in their bodies. Rumour has it that they all have a positive response when they hear Mozart.

Benefits For The Expectant Mother

- Calm and positive approach to the experience
- Improvement of posture to relieve back pain
- Increase in energy
- Facilitation of better sleep
- Enhancement of the mother/baby bond
- Promotion of an easier birth

Benefits For The Unborn Child

- Enhancement of the bond between mother and child
- Stimulation of the brain and developing nervous system
- Elevation of IQ (although this can not be proven!)
- Advancing language development (there is no way to prove that either)
- Developing spatial and mathematical intelligence (and again, there is no way we could measure this while the baby is still in the womb.)

Benefits For The Father

Fathers are welcome to share this unique experience with their partner and child at no extra charge. More often than not they can do with some relaxation in this period of change. It will enable them to be more present and at ease and enjoy this period of peaceful privacy with their partners.

Benefits for Others

Doing Listening Training with other mothers/couples could be an attractive option for those who want to save on the costs of the sessions.