

# Music and Sound for the Unborn Child (excerpts)

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Throughout the ages and in diverse cultures, music and sound have found a meaningful relationship with pregnancy, birth, and early childhood. Pregnancy is a time of heightened sensitivity and creativity in a woman's life and music can play a significant role in supporting the changes taking place in her, and in nurturing the life of the unborn baby. Music and sound affect us not only emotionally, but also physically and spiritually.

The sense of hearing is fully developed in the womb before birth, and is one reason why music plays an important role during pregnancy. It is also significant that the auditory nerves are more widely distributed throughout the body and have more connections than other nerves. The ear appears in the third week of pregnancy and is functional by 16 weeks. At 24 weeks, even before the ear is completely developed, the fetus begins active listening. At four and a half months, the ear of the fetus is already adult-like in shape and size.

In the womb, the baby is highly stimulated through song and speech throughout the mother's pregnancy. The baby's inner ear hears sound mostly through the bones of its skull, the mother's cradling pelvic bones, and the surrounding amniotic waters. Since the speed of sound in water is more than four times the speed of sound in the air, these elements amplify and serve as excellent sound conductors. As a consequence, the mother's voice is a predominant feature in the womb and, since it is unlike anything else in the uterine environment, the baby listens to it with great expectation.

The elements of music: pitch, timbre, intensity, and rhythm are essential elements in learning or speaking a language. Through his sense of hearing in the womb, the baby learns the intonation patterns of sound and frequencies of language in his culture. Singing is significant because the singing voice has a richer frequency range than the spoken word. Music prepares the ear, body, and brain to listen to and integrate sounds in language. In summary, music plays a vital role in the sensory development of the baby.

Lullabies are often no longer passed down from generation to generation. The loss of this tradition has left a void in the psycho/social/spiritual connection with babies in the womb. Lullabies help mothers develop a selfless love and tenderness for the baby they were carrying.

When mothers sing during pregnancy, they bond more consciously with their babies. It is worth mentioning that movement is inherent in music; mothers feel this instinctively and rock their babies while singing them to sleep. Mothers may sing their favorite lullaby while holding their abdomen and gently rocking or swaying, patting or tapping their abdomen on the beat of the music. Newborns have shown a preference for a melody their mother sang to them in the womb rather than a new song sung by her.

The quality and choice of music during pregnancy has a great impact. Exposing babies to inappropriate music that is loud, percussive, and monotonous can affect a baby's psyche, temperament, and physiology. Live music sung by the mother and father is the greatest gift and the most satisfying choice for the baby. Intense musical styles, with their emphasis on fast, loud, and syncopated rhythms can affect our heartbeat adversely. Our heartbeat cannot maintain its perfect and natural rhythm under this assault, as it may raise blood pressure and cause hypertension. Rhythm, after all, is one of the most powerful and basic elements of life, as it is in music.

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