

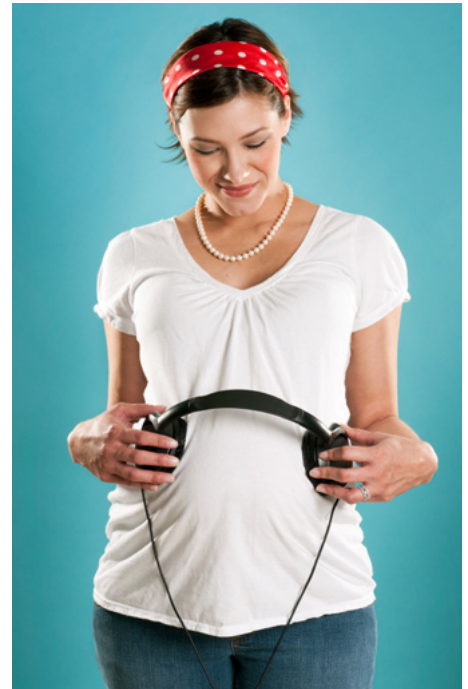
## 7 WAYS MUSIC BENEFITS YOUR BABY

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Did you know that tapping your foot when you hear music is related to the rhythms you learned when you were in your mother's womb? Playing music to your baby prenatally and after birth imprints the recognition of musical beats and patterns in your baby's brain, and fosters your baby's neurological and physical development. Dr Brent Logan, director of the Prenatal Institute in Washington and author of *Learning Before Birth: Every Child Deserves Giftedness*, shares his insight on the ways music can benefit your baby's development.

### 1. Music encourages early learning

According to Dr Logan, age-appropriate rhythms and tones introduce a prenatal child (and then, eventually, the infant) to basic perceptual and reasoning principles, such as comparison, contrast, repetition and alternation. The fetal enrichment specialist says this is what composes our first learning, in turn influencing all later knowledge and actions. "Prenatally, sound is the dominant format [of learning stimulation] while, after birth, sonic/audible patterns are complemented by information from the other senses," he adds.



### 2. Music primes babies to enjoy songs and melodies

When in utero, a baby -- whose hearing commences at 14 weeks after conception -- tunes in to his mother's maternal blood pulse, which is about 60 beats per minute and 95 decibels loud. "That stimulus becomes our most underlying imprint... a prenatal child can still sleep undisturbed, although its brain is constantly tracking repeated sonic activity," says Dr Logan, who developed BabyPlus, the first clinically proven educational tool designed for prenatal use. The doctor adds that, prenatally, a child will recognize only slight variations in the mother's heartbeat but, once born, will become quite interested in the simplest of melodies, such as classic baby songs, because their few notes and steady rhythms are just slightly richer versions of the maternal heart sound.

### 3. Music teaches your baby to communicate

"Everything in our universe demonstrates order; even chaos follows certain rules," says Dr Logan. "Before birth, the shapes of sound establish a baseline for increasing levels of information." Music encourages the baby's brain to put information in an understandable order, which encourages the development of communication skills. Research published in *Proceedings of the National Academy of Sciences* demonstrates that the perception of musical beats is learned in the womb, and that the auditory capabilities underlying beat induction (being able to synchronize behavior with musical rhythms) are necessary for infants to adapt to the rhythm of a caretaker's speech and to learn how to respond to it.

According to Dr Logan, the acquired sense of order that music can help develop fosters a stronger capacity for memory and data transmission. He explains, “The degree of memory storage and data transmission speed are enhanced when formative neurology is allowed a wider and deeper range of exposure to novel stimuli at the earliest opportunity.” That means exposing your child to music prenatally as well as after birth will continue to strengthen her memory, comprehension and learning capacity.

## **5. Music encourages your baby to move**

“Rhythms similar to the maternal bloodpulse cause most prenatal children to move their limbs in syncopated response,” says Dr Logan. And, after birth, babies are quite thrilled to move to music. This physical response helps your baby develop strength, coordination, motor control and overall fitness. Begun early, this can establish the importance and even enjoyment of physical activity.

## **6. Music is soothing**

Every time you tap your foot to a musical beat, you’re essentially taking yourself back to the comfort of the womb. “In response to the most innate sense of pattern (that which was imprinted in the womb), attention refocuses on what first reassured us,” Dr Logan explains. “It is a cognitive and visceral pleasure to return there...no matter how many layers of sophistication have accrued since.”

## **7. Music is fun**

Incorporating music into your day while you are pregnant and once your child is born not only helps encourage intellectual and physical development; it can foster your and your child’s desire for fun, as well. Music can lift your spirits, make you smile, touch your heart and even help create meaningful memories. If music can do that for you, imagine how early exposure to music will benefit your baby.