

# Musical Genes

It is unclear if playing music to a child in the womb can help develop the child's talents. But nurturing a newborn in a musical environment certainly can

**I**T IS SAFE to say most parents want to give their children the utmost start in life and will do everything to raise successful, well-adjusted human beings. But when does this nurturing begin? Does it begin in the mother's womb?

For years, people have suggested that playing Western classical music, such as Mozart, for an unborn child can make the child more intelligent, enhance creativity and spark appreciation for classical music. Opinions on this subject vary greatly.

This topic is very personal to me because I'm celebrating the arrival of my first child. Being a professional Western classical singer and teacher, I often wonder what kind of influence my musical environment has or will have on my baby's development outside the womb.

I have been fortunate to have had a good pregnancy. My doctor specifically said to me, "Keep the stimulus in your life. Read a book, listen to Mozart and stay active to stimulate yourself and in turn this is stimulating the baby." My doctor's advice concurs with my belief

— what keeps the mother happy, keeps the baby happy, in the womb and out.

When I discovered I was pregnant, I wondered if I should take more steps to stimulate my unborn child or let my everyday environment provide the stimulus. While I like spontaneity and watching situations unfold in their organic way, my ability to be creative also stems from self-discipline and following a routine.

## NATURAL STIMULUS

So as a musician, teacher, writer and physically active individual, I often feel that I am providing my baby with plenty of natural stimulus and important one-on-one time just by living my life as I normally would and paying more attention to my and my baby's ever-changing body and mind.

Will I ever truly know how the environment that I had provided for my baby in the womb affected her? There are no current scientific studies to prove that purposely exposing your unborn child to classical music really does anything to enhance their intelligence. In fact, this theory has

somewhat been debunked.

Most researchers studying fetal development say Mother Nature and the stimuli your baby naturally receives in the womb from your everyday conversations and activities are good enough to prepare your baby for the outside world. In fact, some experts worry that putting speakers or headphones to your abdomen could actually disrupt your baby's sleep patterns or the natural order of growth.

At about 3 months, an unborn child's most developed sense is hearing. At about 20 weeks, the fetus can start hearing sounds outside of the womb.

The fetus can hear music, but mostly the lower bass notes as these are filtered through the amniotic fluid; the walls of the womb filter out most high frequencies. The unborn child is most likely to hear the mother's voice throughout the day; it is said an unborn child can memorize the patterns of the mother's voice. Other voices have to pass through the air, then through the womb to be heard. Also, interestingly, vowels can be heard over consonants in the womb so speech sounds more melodic and lyrical to an unborn child.

Although music may not make your fetus more intelligent, the type of music a baby is exposed to can alter its mood. Fast, excitable music can excite the fetus, whereas music like choral or classical music that mimics the natural sounds and rhythms of the human voice is said to calm the baby and has a sedating effect. Some studies show if the unborn child hears the same music over and over again it may be able to remember it outside the womb.

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**CHILD'S PLAY:** Columnist Geeta Bhatnagar-Novotny sings to her daughter, Sofia Sangeeta. She says her baby instantly recognizes her voice and takes on a new demeanor when she sings. Facing page, Bhatnagar-Novotny performs while she was pregnant.



KATHRYN JACOBI



## Geeta Bhatnagar-Novotny

Geeta Bhatnagar-Novotny balances a career in the arts as a professional classical singer, actor and teacher. She recently added motherhood to the balancing act. [www.geetanovotny.com](http://www.geetanovotny.com)



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tense and stressed, her heart beats faster and her blood pressure rises and vice versa; hormones released due to the stress can affect the unborn child and the physiological effects of stress can creep through the placenta. So when a mother listens to relaxing music or partakes in relaxing activities, she is more likely to relax her baby.

If you want to play calming music for your unborn child, try Mozart symphonies. I believe other types – jazz, easy listening and other music in the classical repertoire and music that relaxes the mother – can have the same result.

I am fascinated to observe that my 3-month-old now strongly reacts to my singing. She recognizes my voice immediately, but when I look into her eyes and sing to her, she takes on a new demeanor. Although I do not croon to her as I would on the operatic stage, I engage her with more simple tones. And with our interactions, she smiles widely and intensely studies my eyes and mouth as her sponge-like brain is discovering the power of communication.

Now as I am in preparation for my concerts, I place her in her baby carrier, strapped against my chest, and I practice my music. She seems to enjoy this time and

surprisingly the loud resonances do not seem to bother her. In fact, I think she finds the sound vibrations relaxing as she falls asleep blanketed by the shriek of a high C! My baby babbles and coos and speaks her own language, but when mommy sings to her, her babbles and coos take on a much more lyrical sound as she attempts to mimic me. We go back and forth in our own language for quite some times as she tries to decipher the sonorous world around her.

### LIFE-LONG MELODY

Obviously lifestyle has a great deal to do with nurture. So it is likely that if you already have an inclination toward classical music you will continue to listen to it and play it after your baby is born. Most likely, you will continue with your routine and activities after childbirth and your child will be more apt to learn by example.

For instance, my sister and I are professional musicians; our younger brother dabbled in the arts, but is now completing law school. Would you believe our father is an ob/gyn and our mother an obstetrical nurse and sonographer? I believe our musical interests were mostly nurtured outside the womb. Our Irish mother loves to sing and has a beautiful voice; she loves music

deeply, mostly pop music from all eras. Our Indian father has the utmost respect for Western classical music and loves country music and pop. Our mother would sing and dance with us all the time, while our father would play Western classical music for us and educate us on fine arts.

Our parents started piano lessons for my sister and I when we were 3 and 4; we added violin lessons at 7 and 8. We took to music very quickly, and I have often wondered if some genetic predisposition caused that. We were very disciplined when it came to practicing and we derived great joy from music at a young age.

Since I have known my baby could hear noises outside of the womb, musically, I have performed diverse types of music ranging from the opera Carmen to Wagner operas. I have sung concerts with just piano and sung with full orchestras. I have sung concerts of comical and dramatic music and I have also sung music that has evoked much emotion in me, whether joyful or melancholic. And as most pregnant women will tell you, our emotions run intense at this time. Since music has always had a powerful affect on me, at times I have found it challenging to sing a beautiful song with certain lyrics, as I would just break down in tears. Luckily, though, this never happened during a concert.

Life is challenging and not a bed of roses, and my little one will find that out soon enough. This child will create her very own identity and my job is to work with that and to nurture her as best as I possibly can. And I know I have embarked on the most immense, intense and intricate journey of my life in learning and loving.

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