

# The effect of music in a developing fetus

[Health & Medicine](#), [Pregnancy](#)



A study that was done by the U. S. Department of Health and Human services (2011) stated that two to three of every 1, 000 children in the United States are born deaf or hard-of-hearing, and more lose their hearing later during childhood. As a fetus develops in the mother's uterus there are things that a mother needs to be concern about. The mother must take care of herself in order for her to take care of her growing baby. Mothers who do not secure their fetus in a safe environment are risking the chance of their child experiencing birth defects at birth.

Every mother wants to give birth to a healthy child. It can be heartbreaking for a mother to find out that their child has been born with a birth defect such as a hearing problem or possibly having a deaf child. Music has a powerful effect to our emotions, and it can affect the way we think. Music can calm the baby but mothers should be aware of the possibilities of birth defects, such as, hard-hearing, deaf, and even death. Many mothers have a concern if music is the best thing for their growing fetus or can it harm the fetus.

There have been many articles stating that classical music helps make the baby become smarter but there are no proven scientific facts. Classical music is most suggested for the unborn to listen to because it can stimulate the baby and can come out with positive results (Pregnancy-info. net, 2012). Exposure to loud chaotic music can cause some birth defects when baby is born (Coila, 2012). Classical music has had a positive impact on the pregnant woman, which makes people believe that it has the same impact on the fetus.

The soothing sounds of the classical music has proven to be more relaxing and can help lower blood pressure, heart burn and morning sickness for some. A study done in the 1990s showed that listening to the classic pianist Mozart can help improve spatial reasoning in college students (Weinhouse, 2009). After this news got out to the public there was a craze that people wanted the younger generations to listen to Mozart to become more intelligent. Mothers were told to have their toddlers then infants then fetus' listen to Mozart so they can become more intelligent when they grow up.

Though this may not be true since we do not know what is going on with the fetus mentally or cognitively while in the womb. Classical music has had a positive impact on the pregnant woman, which makes people believe that it has the same impact on the fetus. Many mothers have questioned if having their fetus exposed to music could come to a positive or negative result. According to the website pregnancy-info. net (2012), playing soft music for your fetus stimulates the fetus to be calm and is probably best for the fetus development rather than loud chaotic music.

Fetal breathing patterns were measure by researchers and in the result it showed that babies respond to musical rhythms, and that calm music has an effect for soothing the baby (Music and Your Fetus, para. 4). A study showed that if the fetus is played the same song throughout the pregnancy the fetus will show interest in that song for about the first year of life. Prenatal musical stimulation can definitely come in positive results such as increased attention span, improved sleeping habits, increased cognitive development, and a higher level of language skills (" Music and Your Fetus", 2012).

There are no proven facts that playing music for the unborn child will make him or her smarter but studies have shown that it makes the baby do better in math-related studies (Music and Your Fetus, para. 5). Rock music is considered too chaotic for the fetus and can cause hearing problems when the baby is born (Coila, 2012). However, classical and acoustic music is soft and soothing; it is most recommended for the fetus to hear because it keeps them calm. According to the website articlesbase.com (2008), a study showed that constant exposure to aggressive loud chaotic music negatively alters the brains development.

Playing calming and pleasant music at a level of 70 decibels or lower will surely soothe the mother and the baby (Coila, 2012, para. 5). A study done by Daily Mail showed that when they split pregnant women into two groups, with 116 given music CDs and 120, in the control group, receiving normal pregnancy care found that after two weeks those in the music group were far less stressed, depressed or anxious (NHS Knowledge Service, 2008). The most appropriate age for a fetus to be introduce to music is around the twenty-eighth week and some say even earlier (" Music and Your Fetus, 2012).

According to Pregnancy-info.net (2012) at about 24 weeks the fetus outer, middle, and inner ear are well-developed and by 27 to 30 weeks old the fetus ear is mature enough to respond to the sounds around him/her. Though it has been found true that developing fetuses are stimulated by sounds, there has been no true evidence to prove the baby will learn while growing in the womb (Weinhouse, 2009). You can play a song, read a book or even talk

to your baby, and you may get a kick or movement in your belly, but it is not known if the baby is gaining any knowledge (Arabin, 2012).

The first scientific approach that was used to detect fetal hearing capacities was performed by Preyer in 1885. Studies have shown that the onset of fetal responses to sound has been used by a variety of un-physiological stimulation; an example would be a vibroacoustic stimulation device (VAS). Hundreds of studies were tested on VAS for fetal well-being from 1980 and onwards, no reactions were found when VAS was used in deaf fetuses and that proved that a fetus hearing ability depended on cochlear function.

A study has shown that a fetus at nineteen weeks and onwards were presented with 100 Hz-3000 Hz tone frequencies and first response was at 23 weeks at 500 Hz, 27 weeks 100-500 Hz and at 31 weeks responses were observed at 1000-3000 Hz (Arabin, 2002). A big concern for mothers is the safety of exposing their unborn child to music. One study, done by the American Academy of Pediatrics, looked at the affects of loud music and its harm to a fetus. To gather all this information they waited for the baby to be born and then examined the newborns hearing and made their conclusions.

The mothers for this experiment had to consistently be around noise that was eight five to ninety decibels. The outcome to the several tests showed that the exposure to chaotic noise during pregnancy may result in high-frequency hearing loss in newborns (American Academy of Pediatrics, 1997). Exposure to soft soothing music for the fetus can stimulate and calm the baby. Exposure to pleasant music at about seventy decibels or lower can calm the baby, and the mother as well (Coila, 2012).

Soft calming music is most suggested if you want to stimulate your fetus but keep the volume at a low pitch. You would not want to over stimulate your baby. The mother should play music that she finds calming and relaxing. Usually if the music calms the mother the same will go for the child (Pregnancy-info. net, 2012). However, exposure to loud chaotic music can cause birth defects such as hearing loss, increases the chances of giving birth prematurely, and having the baby born with a low birth weight (Coila, 2012).

Of course every mother wants what is best for their baby so it is important not to turn up the music too high because it can definitely come out with the opposite effect you are aiming for with your child exposed to music (Pregnancy-info. net, 2012). In conclusion, the effect of music in a developing fetus is yet to be studied. There are no scientific facts proving whether music is a good influence on the fetus or not. There are some articles that state that it helps the brain development or helps improve math-related studies and there are some articles that state that it can cause birth defects.

The mother must take into consideration that she must avoid loud aggressive chaotic music for the safety of her unborn baby. After the observation, it is clear that soft calming music can help soothe the mother and the fetus and possibly come out with positive results. Loud chaotic music can definitely cause major birth defects, such as, a deaf baby, a hard-hearing baby, and even death. It is recommended to stay away from loud areas while pregnant for the safety of the unborn baby. If a mother is unsure to expose music to her fetus, a mother's voice is always the best option rather than making a decision that could affect the growing fetus.