
What do babies hear in utero?

REVIEWED BY JENNIFER LINCOLN, MD, IBCLC, BOARD CERTIFIED OB/GYN

Research shows that babies may be able to hear sounds in the womb as early as the 18th week of pregnancy, when the ears first start to stand out from the head. But what do they hear? And do babies understand or remember anything they heard in the womb after birth? A study published recently in the *Proceedings of the National Academy of Sciences* takes an important step toward answering those questions.

Researchers gave pregnant moms a recording to play in their last few months of pregnancy. On the recording, the made-up word “tatata” was repeated over and over, sometimes using a different vowel sound for the middle syllable and sometimes mixed with music. The idea was to mimic what happens with real words in everyday speech.

There was also a controlled group of babies that didn’t hear the made-up word. After birth, researchers used EEGs on both groups of infants to monitor their brain’s response to hearing “tatata” again.

The babies who heard the recording in the womb remembered the word after they were born, as evidenced by increased brain activity seen on their EEGs. And babies who heard it the most often were the most likely to recognize the word even if it was said a bit differently.

The results suggest that babies in the womb can not only hear but also **remember a lot more** than previously thought. However, experts caution parents not to read too much into this single result. There is no evidence to date that demonstrates that hearing and remembering things from the womb has any long-term benefit. Additionally, we do not yet know if the memories of sound heard before birth stay with babies as they grow, since the study tested newborns when they were less than month old.

Before turning up Beethoven and trying to **teach your baby about classical music** in utero, keep in mind that loud sounds or too many sounds may actually have a negative effect on developing fetuses. They can become overstimulated at a time when their brains are rapidly growing and changing. Just as you sleep, fetuses do as well, so remember that they need quiet time too!

The best advice for expectant mothers? Let your baby hear the world around them: normal speech, **reading aloud**, singing, even music—but skip the headphones and language CDs and spend that money elsewhere. While it’s never too early to start using names like “Mama” or “Dada” early, don’t feel like it’s a must!

Reviewed by Dr. Jen Lincoln, April 2020

Takeaways

- Babies in the womb may be able to hear as early as the 18th week of pregnancy.
- A recent study suggests babies recognize words they hear in the womb after they are born.
- There's no evidence yet that hearing things in utero leads to early language development or has long-term benefits.
- Parents should skip the headphones and language CDs in favor of normal speech and daily activities.