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HEALTH

Study: Parents Can Help Babies Get Rhythm

New Research Shows Moms Can Help Babies Learn About Rhythm by Bouncing Them While Singing

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The Associated Press

WASHINGTON Jun 2, 2005 — Gently bounce a baby while you sing, and you'll usually get squeals of glee. But it's not just fun: Feeling the beat helps wire babies' brains to hear rhythm. So says new research that tested moms and babies doing what comes naturally dancing around together.

Everybody knows babies love music. Around the globe, parents sing to their infants in a special way, with a distinctive high pitch that's soothingly slow for a lullaby and elaborately bright at playtime. Babies catch on quickly, able to perceive aspects of melody and recognize different beats at just a few months of age.

As psychologist Laurel Trainor studied how babies perceive music, she noticed that parents hardly ever sing to them without bouncing or rocking or playing with their feet. She wondered if that movement was important developmentally.

Her research shows it is: Using multiple senses helps the brain learn about rhythm how we move indeed influences what we hear Trainor reports in Friday's edition of the journal Science.

"It's wiring the sensory system," said Trainor, of Canada's McMaster University. "That early experience that parents do naturally is probably really important for learning down the road."

Consider it an early step toward learning to make music, or at least to really appreciate it, said infant development specialist David Lewkowicz, a psychology professor at Florida Atlantic University.

"It's a very clever kind of study," said Lewkowicz, whose own research also shows that stimulating multiple senses is important for brain development. "When babies are learning about their world, we should never lose sight of the fact that they are learning in a … multisensory context."

Trainor and colleague Jessica Phillips-Silver tested 16 healthy 7-month-olds by having them listen to music made by a snare drum and sticks that had an ambiguous rhythm no accented beats. Mothers bounced half the infants on every second beat, in a march-like rhythm, and half on every third beat, in a waltz-like rhythm.

Then the researchers played the music again, this time with the beats accented in either the march or waltz pattern.

The babies preferred to listen to the pattern that matched how they'd been bounced. (Trainor measured preference by how long the babies looked at speakers playing the different selections.)

Watching someone else bounce to the music didn't do the trick. In a series of tests, the babies picked out a rhythm only if they'd been moved to that beat while listening to the original, nonaccented tune.

Nor was vision necessary. Blindfolded babies picked out the rhythm, too, as long as they'd been bounced.

So what if you don't boogie with your baby?
No one needs continual bouncing, and passive listening certainly isn't bad. "But they're not getting the full experience that they would naturally get in most human cultures" without some bouncing along, says Trainor, whose research was funded by the Canadian government. "It suggests that you're better off to do music in an interactive way.

"It probably doesn't matter if you listen to Mozart or a rock band or jazz," she adds. "All those kinds of music and concurrent rhythms go to wire up the brain."