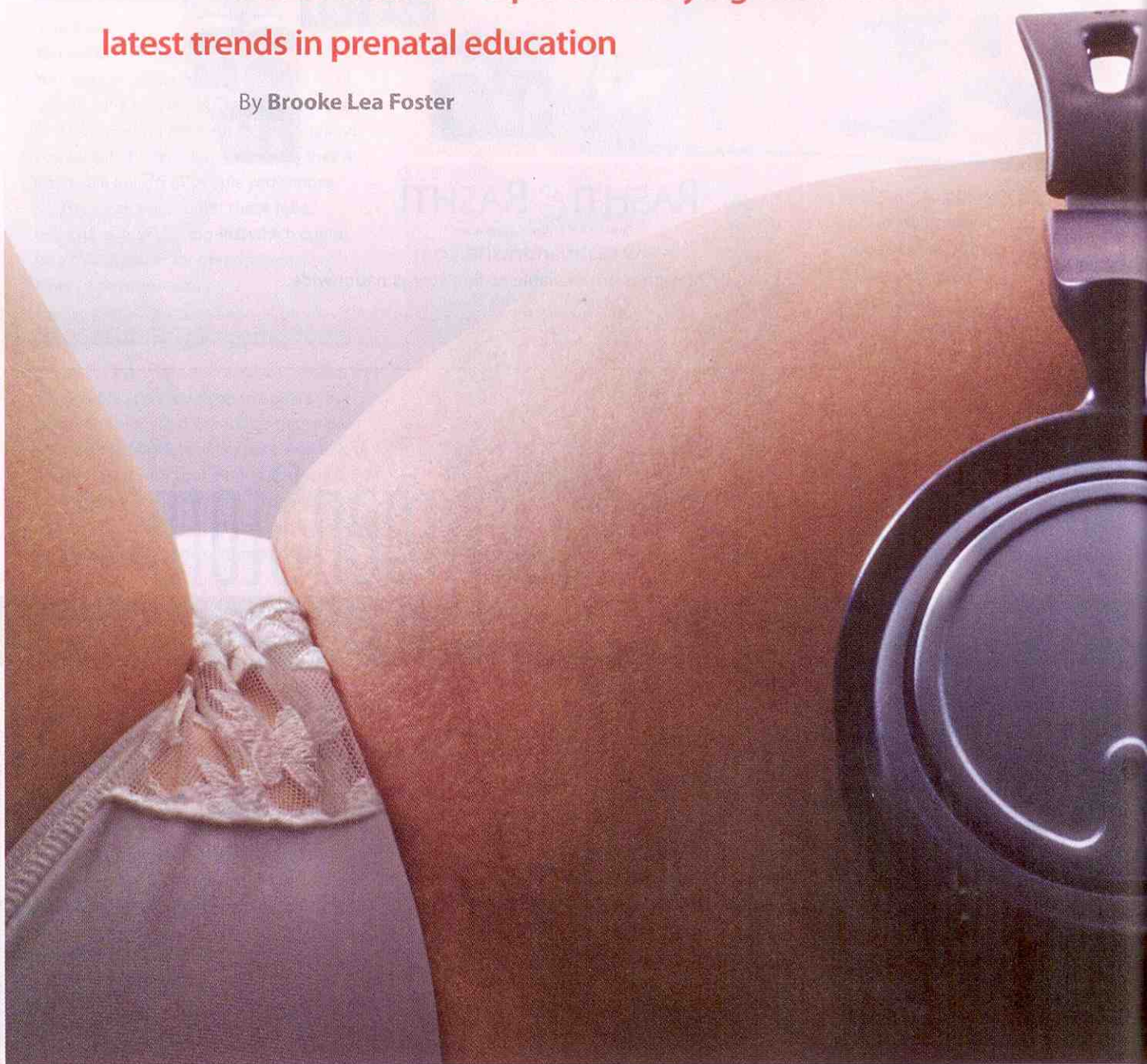


Baby's first

Can you make your child smarter *before* she's born?

Here's what the experts are saying about the latest trends in prenatal education

By Brooke Lea Foster

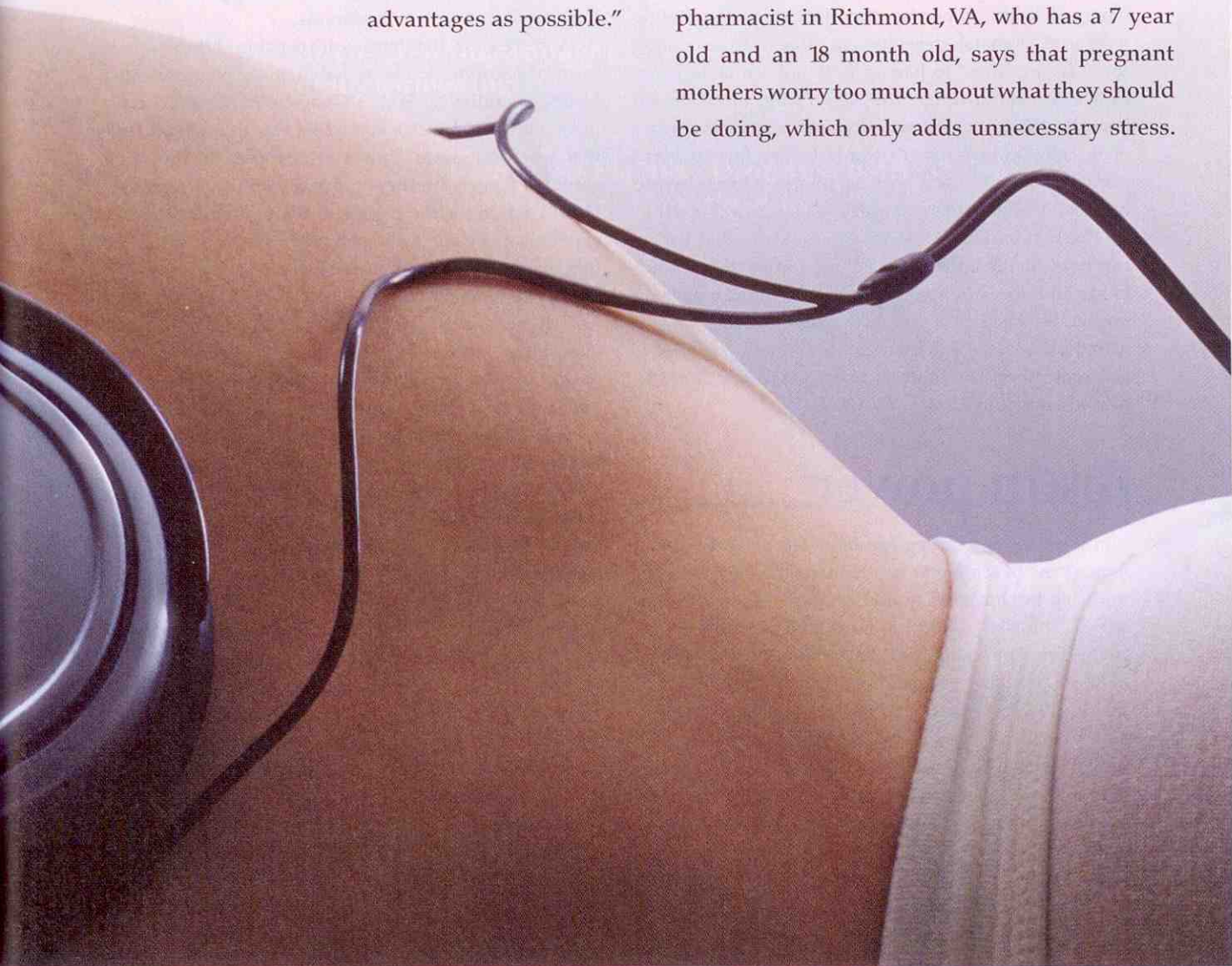


classroom

When Elizabeth Lam was three months pregnant, she visited her local Babies “R” Us. The kindergarten teacher and first-time mom wasn’t shopping for high chairs—she was looking for ways to stimulate the mind of her unborn child. “I was trying to find anything I could to play on my stomach for my son to hear,” she says. “I wanted to give him as many advantages as possible.”

Expectant mothers want to get *everything* right. We try to eat right, and pray that there are no complications. We stay away from caffeine and fruits sprayed with pesticides and pop DHA supplements. We do everything to give our babies a head start—and it’s happening earlier and earlier.

Too early for some, in fact, Jen Taylor, a pharmacist in Richmond, VA, who has a 7 year old and an 18 month old, says that pregnant mothers worry too much about what they should be doing, which only adds unnecessary stress.





TRY THIS:

Ritmo by Nuvo **prenatal audio belt.**

It looks like a strappy fanny pack and enables a pregnant mom to play her favorite songs to her unborn baby. Available fall 2009, \$100, nuvo-group.com

Aside from taking nutritional supplements and trying to get her baby to move by shining a flashlight on her belly, Jen was laid back during her pregnancies. "You can't control everything about your child," she says, "I believe my kids are who they were meant to be."

In the last couple of decades, researchers have emerged with numerous theories about promoting increased prenatal development, from implementing the "Mozart effect" to having your unborn child listen to a heartbeat at different speeds, both alleged brain boosters. While one website promises to share the secret of teaching your fetus "25 words before they're born" (for only \$39.95!), a new book says it can tell you how to bond with your child by channeling your baby's spirit.

The bottom line: At 18 weeks, we know that babies can hear. So it's up to you to figure out what you want to say and do—and if you believe that you can have an impact. So whether you want to toss these theories out with the diapers or add them to your mommy repertoire, just remember: The brain is like a parachute: It works best when it's open.

Brain power

Ann Byrd began reading her baby Dr. Seuss books as soon as she became pregnant. She read emails aloud at work and her husband recited whatever he was reading in bed. She also played the fetus a classical music CD for 30 minutes each day. "My husband and I have a long-standing joke that our gene pool has a little too much chlorine in it," she says. "We were going to do everything we could to make him as smart as possible."

She believes her son recognized that music when he was born. "It was the CD we used to calm him," Byrd says. Today, the 4 year old's vocabulary is advanced and he tested into his district's gifted program. "There's no proof that any of this did anything for his intelligence, but I honestly believe it played a role," she says.

While babies may recognize the stories they were

read or music they listened to in the womb, experts say there's no evidence that prenatal exposure to classical music or books will make your baby smarter. We do know that once they're born, babies know the sound of their mother's voice and prefer hearing it. They also prefer to hear whatever language she's been speaking, since they're familiar with those sounds.

And we know that fetuses are capable of the simplest form of learning, know as habituation. Neuroscientist Lise Eliot, author of *What's Going On In There?: How the Brain and Mind Develop in the First Five Years of Life*, says that when late-term fetuses are exposed to the same stimulus repeatedly, they stop responding as vigorously to it. "Learning is the change of the brain as a result of experience or a change in behavior," she says. "It tells us that there are circuits that are able to respond and adapt to the environment."

F. Rene Van de Carr, M.D., a retired obstetrics and gynecology doctor in Hayward, CA, is the founder of the now-defunct Prenatal University, where he experimented with mother/fetus communication. Mothers tapped their bellies each time the baby kicked, beginning a dialogue in "touch communication." Van de Carr claims that over time mothers would tap or rub their bellies first—and their babies would kick back, although his studies are largely anecdotal.

Eliot doesn't buy it. "It's true that babies can recognize a familiar song or story that they heard before birth, but does that mean it will make them smarter? No," Eliot says. If you enjoy reading aloud or tapping out tunes on your belly, she encourages you to do so, but don't be fooled into thinking it will help your baby's thinking skills. "The cerebral cortex is really immature before birth," she says. "There's very little cortical activity, which is where conscious learning takes place."

Liz Moore, a pediatrician in Carmel, IN, used BabyPlus Prenatal Curriculum Program when she was pregnant with Mary, 3, and Lucy, 9 months. Beginning at 18 weeks, Moore wore the device, which looks like a fanny pack and simulates the sound of a mother's heart-

beat, for an hour in the morning and evening. The curriculum consists of 16 auditory lessons and is designed to strengthen learning abilities. The heartbeat beeps at different speeds, which allegedly inspires your fetus to track the sounds, look for the changes, and learn. Moore, 33, was skeptical the first time she used it, but she liked that the baby seemed to move around more to the rhythmic sounds. Today, she believes it's why Mary and Lucy are so smart.


Lisa Jarrett, president of BabyPlus, says that people often accuse her of trying to manufacture geniuses. "Would you accuse a mom taking a vitamin that she's trying to make an Olympian?" Jarrett asks. "No. But if you can enrich the environment of your baby, why wouldn't you?" Still, there's only anecdotal evidence supporting the claims of BabyPlus, which sold 18,000 devices last year. David Chamberlain, editor of the *Journal of Prenatal & Perinatal Psychology*, says "People are overdoing it. Babies are natural learners. If parents are getting results, it's luck."

Janet Dipietro, a developmental psychologist at The Johns Hopkins University in Baltimore, studies fetal development. She says that directing classical music to your belly or using a device like BabyPlus could actually harm the fetus, rather than help. Studies of animals suggest that prenatal sensory stimulation beyond what is typical can interfere with normal development. While Jarrett says the device is no louder than the sounds most babies hear in the womb, Dipietro says we still don't know if it's helping—or hurting.

Nature or nurture?

Melissa Timmons decided early in her pregnancy that she wanted her child to have an open mind. So she created a diverse play list of songs on her iPod and tucked the ear buds in her belly button for the baby to hear. "I felt like the music was opening her up to different cultures, different people," says Timmons, who lives in Philadelphia with her husband and 1-year-old Grace.

Is it possible to make fetuses more open-minded or more inclined to play piano after they're born? Van de Carr believes in "prenatal imprinting," that mothers can predetermine their children's likes and dislikes while they're still in the womb.



TRY THIS:
BabyPlus prenatal education system
boosts baby's brainpower.
\$150, babyplus.com

There is also evidence that a mother's state of mind can impact her baby's personality; a happy mother makes for a happy baby. "Babies are wired into their mothers," Chamberlain says. In his book *The Biology of Belief*, former medical school professor Bruce Lipton, Ph.D., says that breakthroughs in genetics indicate that DNA does not control our biological makeup. Instead, DNA is controlled by influences outside of the cell, like positive or negative energy, which, if true, means that mothers can make or break their children—and influence their personalities.

Ultrasounds show that when a mother feels stress, the baby feels it too. A study in Holland found that mothers with high levels of stress during pregnancy are more likely to give birth to anxious children. Another study linked fetuses that had higher amounts of the stress hormone cortisol with lower IQ scores at 18 months, while another found that stress can lead to an increased risk of developing attention deficit hyperactivity disorder (ADHD).

Carista Luminare-Rosen, author of *Parenting Begins Before Conception*, says it's important to consider the spiritual and emotional development of your child. She suggests taking babies out of stressful situations; if you wouldn't want your newborn in a situation like a loud concert, then don't bring your unborn baby. When she was pregnant, she'd reassure her fetus during stressful times. "I'd give her a sense of protection," she says.

Better through bonding

Beth Stolte from Columbia, MD, took prenatal yoga when she was pregnant. Stolte looked forward to *shavasana*, a quiet period at the end of practice, when she'd put one hand on her heart and the other on her belly, while directing good energy and thoughts to her baby. Stolte gets weepy just thinking about it. "I loved those moments," she says. "I felt so close to him."

Some women sing to their babies, while others talk to them like a regular person. "Look, cows!" Cynthia McCabe, who is due in August, said recently to her unborn daughter. "I will talk to her about what I'm doing while I'm cooking or planting flowers, or I'll tell her, 'Today, we're going to grandma and grandpa's house!'"

Penny Chang, an energy healer in Charlottesville, VA, who works with women on prenatal bonding, suggests you take five minutes each day to spend time with your baby. "Put your hands on your belly," she says. "Tell the baby you love it." Luminare-Rosen says it's important for women to get to know their babies in the womb. "By the time the child comes out, you'll feel like you've had a relationship developed out of your care for the baby," she says. She also suggests writing letters to your baby, or keeping a journal of the experience, and sharing it with your child later.

Kim O'Neill, author of *Bond With Your Baby Before Birth*, says that many women talk to their babies, but few listen for an answer. O'Neill is a professional psychic

5 things you can do now for your unborn baby

1 Exercise. One study found that women who continued to exercise throughout pregnancy had babies who scored higher on intelligence tests.

2 Pop a multi-vitamin and a DHA supplement. These nutrients, especially omega 3s, are necessary for neurological development.

3 Wash your hands. A virus can be very dangerous to a fetus. If you feel sick, see a doctor ASAP.

4 Relax. If you're relaxed, your baby will be too.

5 Get a good night's sleep. You're preparing for a big change. Be ready!



TRY THIS:

Ultra Sound: Music for the Unborn Child, a CD with **classical music** by Brahms, Bach, and others to stimulate a fetus's cognitive and artistic abilities. \$10, amazon.com

(she was named Houston's Best Psychic in 2008) who believes that a spirit chooses its mother, and that the spirit is with the mother during pregnancy. When she was pregnant, O'Neill says her baby's spirit told her that she was having a boy and he helped choose his own name. O'Neill's book is filled with similar stories. One baby told his mother he wanted to be a pilot, another wanted to hear Billie Holiday rather than "Twinkle, Twinkle Little Star" in his nursery.

O'Neill recommends taking a notebook and pen and sitting somewhere quiet for 15 minutes. Begin by saying: "Do I have a baby speaking with me?" Some women report feeling goose bumps, others hear a voice inside their heads, "Hello, Mommy. I'm here." O'Neill says most women will think it's their mind answering back, but "you're actually communicating with the baby's spirit." Ask the baby whatever you want and record the answers: *What is your gender? What do you want your name to be? Why did you pick me as your mother?* Luminare-Rosen and Chang also chatted with their babies' spirits while they were pregnant. "Even if you're not sure it's the spirit talking back, if it's your ego mocking up an answer, it's beneficial," Luminare-Rosen says.

It's up to you

The one thing all experts agree upon is the undeniable power of the mother/child connection. So regardless of popular wisdom, use this opportunity to tap into your own instincts about what's right for your baby, before and after she's born. And above all, enjoy the ride. ●

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