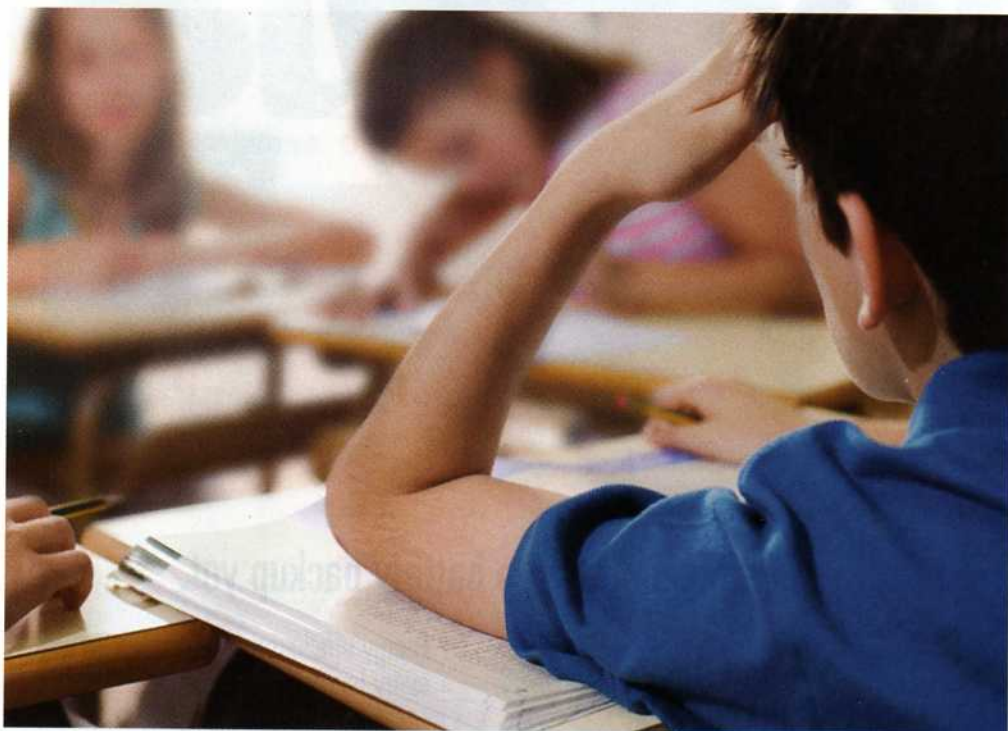


## Better Learning Through Fidgeting.

Kids with ADHD may seem distracted, but all that wiggling can help them focus



BY JOHN CLOUD

LIKE NOSE-PICKING AND A preoccupation with feculence, the inability to sit still is a defining characteristic of childhood. But kids with attention-deficit/hyperactivity disorder (ADHD) squirm constantly, even when others can remain quiet. Parents and teachers often respond by trying to get them to stop fidgeting at any cost, assuming that if they just settle down, they'll be able to focus and learn.

A new study suggests it might be better to let them jiggle all they want. That's because kids use movement—like swiveling in chairs or bouncing at their desks—the way adults use caffeine: to stay focused. Rather than prevent learning, fidgeting may actually facilitate it.

Stimulants like caffeine and Ritalin can help you pay

attention by augmenting your working (or short-term) memory, where information is stored temporarily and used to carry out immediate tasks. ADHD kids have a hard time with working memory; Mark Rapport, a professor at the University of Central Florida (UCF) in Orlando, believes squirming helps stimulate networks in the brain that control working memory.

His study was small—just 23 boys ages 8 to 12—but meticulous: it took four years to recruit, screen and test them and analyze the results. I've always been fidgety, so I asked Rapport if he wouldn't mind putting me through the same tests—which is how I found myself in a windowless room at the UCF psychology department, with an actigraph, used to measure kinetic activity, affixed to my wrist.

At first the test, which in-

involved reciting random numbers back in the correct order, sounded simple—not least because I knew an 8-year-old could do it. But working-memory tests require intense concentration, and I was nervous. Rapport, several grad students, a UCF p.r. official and a friend of mine were all watching. I ended up scoring worse than some of the kids.

My nerves mimicked, in a way, the cognitive strain of ADHD, which compromises the brain's executive functioning—its ability to master unexpected exercises. The same way I got nervous, ADHD kids get momentarily lost, their attention fractured. Rapport, a former school psychologist, says many teachers don't understand how ADHD kids process information. "If you go into a typical classroom," he tells me, "you might hear, 'Take out the book. Turn to page 23. Do items 1 through 8, but don't do 5.' And you've just given them four or five directions. The child with working-memory problems has dropped three of them, and so he's like, 'Page 23—what am I supposed to do?'" A better way might be to break down the instructions so as not to overtax kids' working memory.

While drugs like Ritalin can control ADHD, which affects about 3% to 5% of children, the depressing fact is that it is incurable. Rapport hopes his work will someday lead to new ways to help kids recognize, predict and avoid its concentration gaps. Meanwhile, if you have a child with ADHD, understand that he processes the world in a different way. He might be running circles around you—literally—but that may be his way of paying attention. ■



### CHEMICAL

**RITALIN** and other stimulants augment short-term memory

**PHYSICAL** Motion may help ADHD kids focus by giving their brains a similar kick