

## **Why Kids' Exercise Matters Less Than We Think**

By John Cloud

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The logic seems pretty simple: if you eliminate gym class, school kids will get fatter. In 2006, a blue-ribbon commission released a worried report about the precipitous decline of physical education in schools since the early '90s, coinciding with a ballooning rate of obesity in kids. Both Democrats and Republicans have latched onto that argument to criticize school districts for eliminating P.E. in order to spend more to meet the rigorous testing standards of 2001's No Child Left Behind Act. Even G.O.P. Senator John Cornyn, a Texan who despises most government spending, has bragged about his support for a federal program that gives grants to schools for P.E. classes. Congress has appropriated more than \$320 million for the grants.

But could it be that the underlying assumption behind the program is wrong? Last week at the European Congress on Obesity in Amsterdam, a team of researchers from Peninsula Medical School in the U.K. presented findings from a painstaking study of physical activity in 206 children ages 7 to 11 from three schools in and around Plymouth, on the southern coast of England. Kids at the first school, an expensive private academy, got an average of 9.2 hours per week of scheduled P.E. Kids at the other two schools — one in a village near Plymouth and the other an urban school — got just 2.4 hours and 1.7 hours of P.E. per week, respectively. (See nine kid foods to avoid.)

In order to understand how much actual physical activity the kids were getting, the Peninsula team had them wear ActiGraphs, light but sophisticated devices that measure not only the amount of physical movement that one's body engages in but its intensity. During four one-week periods over four consecutive school terms, the kids wore the ActiGraphs not just during school but all day (except when bathing or sleeping).

The findings are remarkable: No matter how much P.E. they got during school hours, by the end of the day, the kids from the three schools had moved around about the same amount, at about the same intensity. The kids at the fancy private school underwent significantly more physical activity before 3 p.m. than the kids at the other two schools, but overall, when you look at entire days, they got no more activity. "Once they get home, if they are very active at school, they are probably staying still a bit more because they've already expended so much energy," says Alissa Frémeaux, a biostatistician who was the primary analyst on the data. "The others are more likely to grab a bike and run around after school, or maybe join a sports club."

Frémeaux's conclusion: "Trying to force a kid to exercise may not work." Anyone who has ever been in P.E. class knows that she's right. (As a certifiable geek, I used to feign stomachaches every day so I could do my homework in the bleachers instead of play basketball.) But is there really nothing we can do to encourage kids to be more active? (See 10 dieting myths debunked.)

Frémeaux and her team did not study behavioral interventions, like programs that reward kids with videogame time if they play an hour of soccer. But her data does suggest that kids have what she calls an activity "set point" — an energy-expenditure baseline to which, over time, they will naturally revert. Despite the fact that they got roughly the same amount of exercise, the kids in the study varied widely in their metabolic health

(measured through cholesterol and triglyceride levels) — factors that contribute to later risks of heart disease — but those differences appeared to owe largely to their diets, not their physical-activity levels.

Evolution is likely at work here. "If you think about how we as a species maintain body mass, you would think that nature would probably not have left the only modifiable component of energy expenditure to chance," says Frémeaux. Rather, evolution probably programs much of our willingness to be active. Sure, some people change their lives and become marathoners at age 50. But most of us don't. Our children are no different: whether they get P.E. or not, their bodies "know" how much they want to move.

Another recent study, also from England, offers support for the set-point thesis. The second research team, based at the University of Exeter, also had a group of kids (this time, 47 boys ages 8 to 10) wear ActiGraphs. The data revealed that very few of the kids — fewer than 15% — sustained any burst of moderate-to-vigorous exercise lasting even five minutes, the kind you would get playing a soccer game in a P.E. class, for instance. And yet those kids were no healthier (as measured by waist size, aerobic fitness and microvascular function) than the kids who moved around the way boys normally do — running, jumping, and throwing balls in very short bursts over long periods. (Truly sedentary boys, on the other hand, are less healthy.) The authors of the study, published in the *International Journal of Pediatric Obesity*, conclude that kids should be encouraged to go out and play, but not necessarily be forced into regular P.E. or onto a sports team.

The new research comports with a growing body of data saying that exercise by itself has far less to do with your body mass than you think. In short, it's the calories, stupid. You can exercise all you want, which will surely make you healthier — reducing your risk of heart disease, diabetes and dementia, for instance — but unless you eat better, or less, it may do nothing to make you thin. All that money we have spent to get kids into P.E. might be better spent helping schools to serve fresh fruits and vegetables at lunch instead of tater tots.