

# Miller School Researchers Publish Findings on Obesity Prevention Intervention

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**Findings from a pilot study, believed to be one of the first designed to examine the effect of a school-based obesity prevention intervention on weight and academic performance, show a decrease in [body mass index](#) and an improvement in academic performance among elementary-aged children.**

The study, conducted by pediatric researchers at the University of Miami Miller School of Medicine and the Agatston Research Foundation on Miami Beach, was released online today in the prestigious *American Journal of Public Health*.

Last week in the flagship journal for nutrition, *Journal of the American Dietetic Association*, results from the same study also showed improvement in weight and [blood pressure](#) among the intervention students.

The Healthier Options for Public Schoolchildren (HOPS) study was conducted over two school years (2004-05 and 2005-06) and included six elementary schools in Osceola County, Florida. Overall the study included 4,588 children, ages 6 to 13, and more than half were Hispanic. The results published today were based on a subsample of 1,197 children who qualified for the Free and Reduced Priced [Meals](#) program of the U.S. Department of Agriculture National School Lunch Program.

"The intervention components we tested purposefully brought together groups that did not always work together, such as [food service](#) personnel, teachers, parents, community-based nutrition educators, and children, to build a healthy school community that resulted in significant health and academic gains," said Danielle Hollar, Ph.D., voluntary assistant professor of medicine at the Miller School and the study's principal investigator.

HOPS was designed to test the combined effect of including nutritious ingredients and [whole foods](#) in school-provided meals, which also provided daily examples of the good nutrition principles being taught in the accompanying educational curricula; providing a [nutrition and healthy](#) lifestyle curriculum, including increased levels of [physical activity](#); and fostering other school-based wellness activities such as gardens. In the study there were four intervention schools and two control schools.

As reported in the *American Journal of Public Health*, "at the end of the two-year period, significantly more children in the intervention schools stayed within the normal body mass index percentile, while more obese children in the intervention schools than in the control schools decreased their body mass index," said Sarah Messiah, Ph.D., research assistant professor of pediatrics at the Miller School and a co-author of the study. "We also observed significantly higher standardized test [scores](#) in intervention children as compared to children who did not participate in the program. As was reported in the *Journal of the American Dietetic Association* last week, significant improvements in blood pressure of intervention children, as compared to non-program children, were observed as well. To have both positive academic and health-related outcomes is very exciting."

The researchers point out that the results are "particularly encouraging given that many children from a low-income background receive a significant proportion of their daily nutrition requirements at school."

In addition, the researchers were able to take advantage of already existing nutrition and healthy living programs to achieve their goals – health and academic achievements. They wrote, "Replication and sustainability were assisted by incorporating U.S. Department of Agriculture Team Nutrition materials, which are available to U.S. schools, as well as The OrganWise Guys, which is used by many U.S. Department of Agriculture Cooperative Extension agents in the United States who conduct nutrition education in low-income schools every day."

"Because every school that participates in the U.S. Department of Agriculture National School Lunch Program must provide nutrition education, and because most counties in the United States and its territories have Cooperative Extension Nutrition Educators who work daily in elementary schools, interventions such as those we implemented during the study are easy to implement and sustain," said Hollar. "And using The OrganWise Guys curricula, which are matched to core academic standards where we ran our study, provided an engaging, fun, and effective intervention tool that incorporates animated organ characters that help children make [healthy nutrition](#) and lifestyle choices."

As the nation, under the direction of First Lady [Michelle Obama](#), launches the "Let's Move" campaign against [childhood obesity](#), these new research findings offer hope for a solution.

"Mrs. Obama is looking for innovative, effective programs that improve health and academic achievement, and what is very exciting is that we have shown that an existing nutrition and healthy living program really works," says Hollar.