

## THE ORGANWISE GUYS (OWG)/THE HEALTHIER OPTIONS FOR PUBLIC SCHOOLCHILDREN (HOPS) STUDY AND PROGRAM

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The OrganWise Guys (OWG)/The Healthier Options for Public Schoolchildren (HOPS) Study was an innovative feasibility study that took place in 53 elementary schools (42 intervention schools; 11 control schools) in Florida, Mississippi, New York, North Carolina, and West Virginia, including approximately 24,000 ethnically and racially diverse children. The study, which began in a set of six schools in central Florida in the fall of 2004, tested the feasibility of an holistic nutrition and healthy lifestyle management program implemented in the elementary school setting *that is modeled every day in each school cafeteria*. As such, through the study interventions, we sought to thematically integrate healthy dietary offerings, nutrition and lifestyle educational curricula, increased levels of physical activity, and other school-based projects, such as school gardens, with the goal of improving the health and academic performance of elementary-aged children in a manner that is replicable in other public school settings. All 53 schools participated in twice-yearly data collection activities (fall/baseline data collection and spring/follow-up data collection).

The nutrition and healthy lifestyle educational arm of the study was two-fold: 1) HOPS Foods of the Month (FoM) programming and 2) *The OrganWise Guys*<sup>®</sup> (OWG). HOPS FoM highlighted nutrient-dense, healthy foods and food groups (such as whole grains, good fats, cruciferous vegetables) and included monthly dissemination of FoM Parent Newsletters, Student Activity Packets, Cafeteria Cards and Posters, and other healthy handouts for parents, teachers, and staff. School cafeterias menued FoM items as part of the regularly-served meals at least five times per month, thus modeling nutrition education taking place in the classrooms. The second component, OWG, was the cornerstone of the highly successful Healthy Options for People through Extension (HOPE) Tri-State (LA, AR, MS) Initiative funded by the W.K. Kellogg Foundation. OWG is a set of evaluated teaching tools that bring the body to life and facilitate the communication of important health issues in a manner understood by children. This innovative, stand-alone curricula is sustainable long-term since it requires little implementation assistance and is linked to core curricula standards, thus allowing healthy concepts to be incorporated into the academic day. Implementation of FoM and OWG programming, through partnerships with child nutrition experts such as University Extension, was shown to be very replicable (1-5).

Pilot study results showed study interventions improved weight, blood pressure, and academic scores of elementary-aged children in a statistically significant manner. Specifically, data showed statistically significant differences between treatment groups with respect to improvements in body mass index (BMI) percentiles age- and gender-specific z-scores (6-12). Study interventions also improved systolic and diastolic blood pressure measures in intervention children as compared to controls, in a statistically significant manner (12,13). Additionally, intervention children achieved statistically significantly higher average Florida Comprehensive Assessment Test (FCAT) math scores as compared to children in control schools. Intervention children achieved higher FCAT reading scores as well, and although the difference did not reach statistical significance, the data are trending in this direction (12). These health and academic improvements were especially strong among low-income, minority children (14). Nutritional analyses of six weeks of 2005-6 intervention and non-intervention breakfast and lunch menus showed nutritional benefits of intervention lunch and breakfast menus as compared to control menus. In 2005-6, dietary intervention programming, which models nutrition education activities taking place in classrooms, resulted in approximately 28% less total fat, 21% less saturated fat, and about two times more dietary fiber in intervention versus control school menus (15,16). Nutrition analyses of 2006-7 menus yielded similar results: the intervention menu resulted in approximately 29% less total fat, 21% less saturated fat, and about one and a half times more dietary fiber than control school menus (17,18).

In addition to study locations described above, in 2008-9 OWG and FoM interventions were implemented as a program in schools in Florida, Illinois, Indiana, and New York (~11,000 children), and in an afterschool program serving ~4,000 children in Florida.

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