

## **EFFECTIVENESS OF THE “WHIZ KIDS THROUGH FITNESS PROGRAM”**

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**Background:** Overweight among schoolchildren has increased in the past decades. Children who are overweight are at risk to non-communicable diseases (NCD) in adult life. Healthy and active lifestyle through education can help prevent NCD. The “Whiz Kids Through Fitness Program” was initiated by the Philippine Association for the Study of Overweight and Obesity (PASOO) in collaboration with the FNRI-DOST to promote these NCD-preventive and intervention measures among schoolchildren. **Objective:** To assess the effectiveness of the “Whiz Kids Through Fitness Program” based on the change in weight-for-age, physical activity level, nutrition knowledge and practices of Grades 1-3 children in St. Scholastica’s College (SSC), City of Manila for over a period of two years. **Methods:** The intervention included nutrition education and physical activity components which were carried out from 2004 to 2006. The lessons were taken from a module developed by the PASOO and incorporated in the Science and Physical Education curriculum. From 147 children randomly selected as respondents, weight and height, physical activity, nutrition knowledge and practices, were collected using Detecto scale and microtoise, pre-tested physical activity and knowledge/practice questionnaires, respectively, at baseline and endline periods each year for two years. Weight-for-age based on IRS-International Reference Standards (IRS), physical activity by a modified Pate classification, and nutrition knowledge/practice score system were used as criteria for assessing program effectiveness. The children were divided into four cohort groups based on school entry. Comparison of means for weight-for-age, physical activity, knowledge and practice scores across four observation periods was done using GLM repeated measures or paired t-test, while the proportions of weight-for-age classification and physical activity level were analyzed by the Chi-square test. **Results:** There was a significant decrease in the proportion of children with above normal weight-for-age within cohorts: cohort 1 (36.2% to 19.6 %), cohort 3 (20% -11.1%) and cohort 4 (26.2 % to 23.4 %), across the observation periods, but the decrease in cohort 2 was not statistically significant across the different periods. Inactive physical activity was noted from the mean score of cohort 1 in the second year of the study (  $5.5 \pm 3.14$  to  $3.64 \pm 2.21$ ), and also cohort 2 ( $5.35 \pm 3$  to  $3.49 \pm 2.05$ ), at baseline and endline respectively. The proportion of inactive children significantly increased during the second year for cohort 1 (from 68.9 % to 97.8 %), and for cohort 2 (80.0% to 98%), and the changes were statistically significant. Scores for knowledge did not significantly change regardless of observation period, but practice scores significantly decreased at the second year of the study ( $3.8 \pm 2.17$  to  $2.26 \pm 2.26$ ). **Conclusions and Recommendations:** The intervention did not show statistically significant positive changes in physical activity level, and knowledge and practice of the children in a period of two years. Anthropometric results of the study are equivocal, but the change in the direction of decreasing overweight at the endline of the second year may suggest that the program promoted weight loss. More studies with longer duration than two years will be worthwhile undertaking to assess the effect of the program on the different outcome measures. Likewise, there is a need to examine the implementation of the program and other factors in the home and school environment that may influence the indicators. It is recommended that policies to promote nutrition education and create a supportive environment for healthy and active lifestyle be implemented in the school.

## **PHYSICAL ACTIVITY OF HIGH SCHOOL STUDENTS IN THE CITY OF MANILA**

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**Introduction:** Results of the Food and Nutrition Research Institute's (FNRI) 2003 6th National Nutrition Surveys indicated an increasing overweight prevalence among students, 6-19 years old, that may lead to obesity and other lifestyle-diseases (e.g. diabetes mellitus, hypertension, coronary heart disease) in later life. Empirical data on the prevention of overweight/obesity among these students are inadequate or not available, particularly on physical activity (PA), to provide basis for formulating effective local school intervention programs. In 2002, the Philippine Association for the Study of Overweight and Obesity (PASOO), in collaboration with the FNRI, initiated in selected schools in the city of Manila, a physical activity assessment study for the younger age group, 6-12 years. This present study is an extension of that prior study, but covering the high school students. **Objective:** To assess the physical activity of students in selected high schools in the city of Manila. **Methods:** The study included 1,217 students, 11-18 years old, from a section each for every year level from first to fourth year, who were selected from 4 public and 4 private high schools by stratified cluster sampling. A modified PA checklist/questionnaire form adapted from Kowalski et. al. (1997) was used. Assisted by researchers, the students were asked to accomplish this form in the school, characterizing these PAs on three typical days: during the most recent physical education (P.E.) day, a non-P.E. day, and a weekend day. The PA data were classified into categories: "light", "moderate" and "active", based on the compendium of PA by Ainsworth (2000), by type of day. A modified scoring system (Pate, 1994) based on PA frequency per day per student was used to categorize students into PA criteria: "Inactive", "Moderately Active", and "Active". **Results:** There were more female than male students (815 vs. 402) in the study. As they move up to the highest academic level, an increasing "inactivity" among the students was revealed. Overall, majority of the students were "inactive" in both public and private schools. The highest PA frequency was recorded for *watching television* and other light activities (i.e. *playing video* or *just sitting down* or *talking with friends at school after lunch*). Only 30% did not perform "active" PA during weekends. Common "moderate" activities done by 14% of the students were *walking for exercise*, *playing basketball* and *volleyball*, which were mostly done in school. **Conclusion.** A high percentage of the at-risk students, aged 11-18 years old, were found to be physically "inactive" (86%). **Recommendation.** It is recommended that policies and programs be formulated that will help students to become more physically active than they presently are.