



Healthy, Well-Nourished Population

Exercising to Prevent Adolescent Obesity and Diabetes

Issue

Physical inactivity is a risk factor for obesity and non-insulin dependent diabetes mellitus (NIDDM) in children and adults. Physical activity declines dramatically in girls more so than boys, during and after puberty, and this decline is associated with greater adolescent obesity and an earlier onset of NIDDM. There is a need for physical activity programs designed to suit the unique interests and needs of adolescent girls. At the University of Arizona, investigators in the College of Agriculture and Life Sciences, together with colleagues in the Colleges of Medicine, Public Health and Education, in partnership with investigators at six other universities (Johns Hopkins University, University of Maryland, University of Minnesota, University of South Carolina, Tulane University, San Diego State University), are working together to develop and test a comprehensive physical activity program tailored specifically to the interests of adolescent girls.

What has been done?

Faculty from the Department of Nutritional Sciences in the UA College of Agriculture and Life Sciences, collaborating with colleagues in the Colleges of Medicine, Public Health and Education, have developed a comprehensive physical activity program designed to engage adolescent girls in regular physical activity. Known as TAAG (Trial of Activity of Adolescent Girls), the project promotes a unique university-community-agency-school partnership to develop, deliver, and sustain the program. Girls will have the opportunity to participate in diverse school-based community-based programs designed to appeal to many interests (e.g., PE and traditional sports teams, dance, kickboxing, Jump Rope for Heart). The program will be tested over the next 3 years for its appeal to adolescent girls and its efficacy for increasing physical activity and improving heart and lung function.

Impact

More than 1,800 girls participated in Phase I, including 310 girls in Tucson, in studies designed to test intervention activities and develop measurement protocols. Girls took part in dance and drama, ethnic dance, Jazzercise, and other girl-friendly activities, and a new equation was developed for estimating body composition in Anglo, Hispanic and African-American girls. In phase II, approximately 3,000 girls in six cities will participate in innovative activity programs at school and in the university. If successful, it is expected that schools and communities nationwide will adopt this one-of-a-kind program developed specifically for adolescent girls.

Funding

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