

Adolescent Physical Activities as Predictors of Young Adult Weight

David Menschik, MD, MPH; Saifuddin Ahmed, PhD; Miriam H. Alexander, MD, MPH; Robert Wm. Blum, MD, MPH, PhD

Objective: To examine the relationship between increased physical activity in adolescence and adult weight status.

Design: Cohort study based on data from the National Longitudinal Study of Adolescent Health.

Setting: In-home interviews.

Participants: A total of 3345 adolescents in grades 8 to 12 with body mass index (calculated as weight in kilograms divided by height in meters squared) data available at baseline and 5 years later.

Main Exposures: Days per week of curricular and extracurricular physical activity.

Main Outcome Measure: Overweight status (body mass index ≥ 25) 5 years after baseline.

Results: Increasing participation in certain extracurricular physical activities and physical education decreased the likelihood of young adulthood overweight. Regarding extracurricular physical activities, the likelihood of being an overweight adult was reduced most (ie, 48%) by performing certain wheel-related activities (ie, rollerblading, roller skating, skateboarding, or bicycling) more than 4 times per week. Each weekday that adolescents participated in physical education decreased the odds of being an overweight adult by 5%, with participation in all 5 weekdays of physical education decreasing the odds by 28%. In general, physical activity predicted normal-weight maintenance better than weight loss.

Conclusion: These data underscore the important role that school-based and extracurricular physical activity play in reducing the likelihood of transitioning to overweight as young adults.

Arch Pediatr Adolesc Med. 2008;162(1):29-33