

PREVENTING CHRONIC DISEASE

PUBLIC HEALTH RESEARCH, PRACTICE, AND POLICY

VOLUME 1: NO. 2

APRIL 2004

SPECIAL TOPICS IN PUBLIC HEALTH
ORIGINAL RESEARCH: FEATURED ABSTRACT FROM THE
18TH NATIONAL CONFERENCE ON CHRONIC DISEASE PREVENTION AND CONTROL

TRAILS, a School-based Walking Program

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Suggested citation for this article: Moore W, Wilson T, Stephens A, Eichner J. TRAILS, a school-based walking program [abstract]. *Prev Chronic Dis* [serial online] 2004 Apr [date cited]. Available from: URL: http://www.cdc.gov/pcd/issues/2004/apr/03_0034o.htm.

PEER REVIEWED

The effects of a high school walking program, The Robust American Indian Lifestyle Study (TRAILS), were evaluated by measuring changes in lipid profile, aerobic capacity, and body composition. The walking program was implemented at Anadarko Public High School in southwest Oklahoma. Approximately 55% of the school's students are Native American, 34% are white, and 4% are African American. Ethnically, 7% of the students are Hispanic or Latino.

The intervention consisted of daily (Monday through Friday) self-paced walking for 35 to 40 minutes for 11 weeks. Pre- and post-intervention assessments of non-fasting lipid profile, non-fasting plasma glucose, aerobic capacity, and body composition were performed.

Twenty-five students completed the pre- and post-intervention assessments. The mean age of the students was 16.7 years (± 1.4). Sixty percent of the students were of normal weight, 4% were at risk for overweight, and 36% were overweight. The mean miles walked was 37.6 (± 10.7). Using paired t-tests, statistically significant improvements were seen in total cholesterol (174.8 to 149.4 mg/dL, $P < .001$); low-density lipoprotein cholesterol (106.4 to 85.1 mg/dL, $P < .001$); non-high-density lipoprotein cholesterol, calculated by subtracting high-density lipoprotein cholesterol from total cholesterol (128.5 to 105.9 mg/dL, $P < .001$); and non-fasting plasma glucose (103.2 to 82.4 mg/dL, $P < .001$).

A school-based walking program may have a positive impact on lipids and non-fasting plasma glucose.

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