

Preadmission Patterns of Dietary Intake in a Sample of Juvenile Detainees

Sergio R.R. Buzzini M.D., M.P.H. Nathan E. Nava, B.S., Dietetic Intern

Abstract

Background: Milk consumption and fruit and vegetable intake among youth is much lower than the Healthy People 2010 recommendations. Little is known about the preadmission dietary patterns of juvenile detainees.

Objective: This study compared the intake of fruits, vegetables, and milk by detained youth with a national sample of high-school students.

Methods: The current analysis is based on a set of 7 questions regarding fruit and vegetable and milk intake from a survey administered at a Juvenile Detention Center (JDC) in Western Pennsylvania. The questions mirrored those used in the 2003 Youth Risk Behavior Surveillance Survey (YRBS) administered by the Centers for Disease Control. Detainees were surveyed within 2 weeks of detention to minimize recall error. Detained females were over-sampled to obtain meaningful statistical analysis. Comparisons were made between the JDC and the Black and White respondents from the YRBS student sample. Chi-square analyses were conducted using the Statistical Package for the Social Sciences (SPSS) version 11. The a priori significant alpha level chosen was $p < .05$.

Results: Compared to students, detained youth were more likely to report consuming 5 or more servings of fruits and/or vegetables a day (30.8% vs. 20.8%, $p < .001$). In both the JDC and YRBS samples, Blacks reported consuming 5 or more servings at a higher rate than Whites, with a more pronounced difference at the JDC. (JDC; 37.9% vs. 20.9%: YRBS; 23.8% vs. 19.2%, $p < .001$). Milk consumption was also reportedly higher among detained youth (22.0% vs. 15.1%, $p < .001$).

Conclusions: The data suggests that detained youth demonstrate healthier dietary patterns related to milk and fruit and vegetable consumption than school based youth. The geographical background of the detainees and subsequent cultural differences regarding food may explain the difference. The student sample demonstrated variability in dietary practices when examined state by state. Pre-detention placement may have affected the availability of healthier foods. Detained youth may have over-reported healthy dietary behavior. Further studies should compare dietary behavior of detained youth with student samples in the same geographic locations.

1. 2003 National School-based Youth Risk Behavior Survey – Public Use Data Documentation. Centers for Disease Control & Prevention. 17 March, 2005. <http://www.cdc.gov/HealthyYouth/YRBS/data/2003/yrbs2003codebook.pdf>

2. Conklin, TJ. Lincoln, T. Tuthill, R.W. Self-reported health and prior health behaviors of newly admitted correctional inmates. American Journal of Public Health. 90(12):1939-41, 2000 Dec.