

Putting Research to Work for Military Families



Focus:
Army

Prevalence of High Body Mass Index Among Children and Adolescents at a US Military Treatment Facility, 2008-2009

Choi, Y. S., Berry-Caban, C., Stratman, R., & Fleming, J. H. (2012). Prevalence of high body mass index among children and adolescents at a US military treatment facility, 2008-2009. *Preventing Chronic Disease: Public Health Research, Practice, and Policy*, 9, E166. doi:10.5888/pcd9.120051

SUMMARY: Youth who are overweight or obese are at increased risk for an array of health problems. Data regarding age, sex, and body mass index (BMI) of military dependents receiving care at an Army medical center were gathered, and BMI of military dependents and a national sample of youth were compared. Military youth are less likely to be overweight (85th- 95th percentile) or obese (\geq 95th percentile) than their civilian counterparts.

KEY FINDINGS:

- Overall, military dependents were significantly less likely than youth in a national sample to be overweight (27% vs. 32%) or obese (12% vs. 17%).
- Compared to youth in a national sample, female dependents, ages 2-5 years, were less likely to be obese, and male and female dependents, age 2-5 years, were less likely to be overweight.
- Across all other categories of age and sex, fewer dependents were overweight and obese than in the national sample, but the differences were not statistically significant.

IMPLICATIONS FOR PROGRAMS:

Programs could:

- Enhance education, activities, and curriculum related to healthy eating, exercise, and other well-being information in military schools
- Offer workshops for military parents about how to promote positive health behaviors among their children
- Provide cooking classes for military families to teach them how to cook healthy meals

IMPLICATIONS FOR POLICIES:

Policies could:

- Recommend education for medical professionals working with military families about how to discuss health, weight, diet, and exercise with overweight or obese military youth
- Support programs that provide physical activity opportunities for military youth
- Encourage collaboration between military youth programs and community programs to provide transportation, fees, and equipment for military youth to participate in recreational activities

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METHODS

- Data were gathered from the electronic medical records of Service members' dependents, age 2-18 years who received medical care at the Womack Army Medical Center in Fort Bragg.
- Dependents' age, sex, and most recent BMI were collected from 2008-2009; the prevalence of overweight and obese youth was calculated.
- Dependents' BMI data was compared to national data from youth 2-19 years of age included in the National Health and Nutrition Examination Survey (NHANES).

PARTICIPANTS

- Participants included 23,778 dependents of Active Duty or retired Service members.
- Dependents were ages 2-18 years (M = 8.3), with 38% of dependents between the ages of 2-5 years, 34% between ages 6-11 years, and 28% ages 12-18 years.
- Dependents were 51% male; no race/ethnicity or other demographic information was provided.

LIMITATIONS

- Potential differences between the samples due to differences in recruitment locations and strategies, inclusion and exclusion criteria, and other factors may have influenced results.
- Military dependents with missing age, sex, or BMI data in the Army medical center's records may have differed from dependents with complete data in a way that impacted results.
- Other untested variables (e.g., parental BMI, race/ethnicity, socioeconomic status, comorbid medical conditions) may have influenced results.

AVENUES FOR FUTURE RESEARCH

Future research could:

- Examine potential mechanisms through which military youth learn healthier eating and exercise habits than civilian youth
- Investigate whether parental BMI is related to child BMI in both military and civilian samples
- Compare whether military youth who live on and off military bases learn and enact different eating and exercise behaviors

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