The Effect of State Competitive Food and Beverage Regulations on Childhood Overweight and Obesity


**SUMMARY:** Self-reported data from dependent children of Army Service members were used to examine the association between Body Mass Index (BMI), the odds of being overweight or obese, dietary outcomes, and state competitive food and beverages (CF&B) policies. Having any policy (i.e., weak or strong) was associated with lower BMI, odds of being overweight or obese, and better dietary choices for children of Army Service members compared to having no policy.

**KEY FINDINGS:**
- States that had seven or more policies, or at least two strong policies, had children with significantly lower BMIs and lower odds of being overweight or obese than states with five or fewer policies and no strong policies.
- Having a weak policy regarding whole foods or either a weak or strong policy regulating fundraisers was associated with lower BMI compared to states with no policy.
- Having a strong policy regarding vending compliance or fundraiser regulation was associated with lower odds of being overweight or obese compared to no policy. Compared to having no policy, having weak policies related to nutritional information, access to free drinking water, and vending regulations were associated with lower odds of being obese or overweight.
- Policies regarding school stores and vending machines were associated with lower consumption of salty and sweet snacks and higher consumption of fruit.

**IMPLICATIONS FOR PROGRAMS:**
Programs could:
- Provide education to Service members and their families regarding the importance of nutrition and making healthy food choices
- Offer cooking classes to military families that teach healthy cooking skills
- Promote the use of installation-based programs and resources that encourage physical activity for military youth

**IMPLICATIONS FOR POLICIES:**
Policies could:
- Provide support for programs that teach military families about the importance of nutrition and/or offer healthy cooking classes
- Develop and support installation-based physical activity programs for military children to promote exercise and reduce the risk of obesity among military youth
- Encourage collaboration between DoD and community-based programs that provide activity-based programs for military families

This product is the result of a partnership funded by the Department of Defense between the Office of Military Community and Family Policy and the USDA’s National Institute of Food and Agriculture through a grant/cooperative agreement with The University of Minnesota.
METHODS
- Online survey data were collected during the Military Teenagers Environment Exercise and Nutrition Study.
- Army personnel records were used to recruit families with children between the ages of 12-13 years located at 12 major Army installations.
- State policy information was obtained from the Bridging the Gap State Wellness Policy Database.
- Policies were coded as "weak" if they used vague terms, suggestions, and recommendations or allowed exceptions to following the policies; policies were coded as "strong" if they provided specific requirements and implementation guidelines.

PARTICIPANTS
- A total of 894 children of Army Service members and one of their parents completed the online survey between spring 2013 and winter 2013-2014.
- Forty percent of the sample was White, almost 47% of the sample were female, and the average age was 13 years.
- A little over 40% of the military families lived on base.

LIMITATIONS
- The sample was only comprised of children of Army Service members and therefore results may not generalize to the broader child population. Further, the findings may not extend to other military branches with installations located in different states than those included in this study.
- Only state CF&B policies were examined; however, co-occurring state policies or other factors could have accounted for or influenced the results.
- Children were only asked to report their dietary choices for the previous seven days which may not accurately assess their overall dietary choices.

AVENUES FOR FUTURE RESEARCH
- Examine how state-level CF&B policies impact behavioral health outcomes in military children
- Explore whether there are specific programs or policies within the military that address childhood obesity
- Examine how well schools implement and follow the state CF&B policies

ASSESSING RESEARCH THAT WORKS

Design
- Appropriate Research Plan and Sample

Methods
- Appropriate Measurement and Analysis

Limitations
- Few

For more information about the Assessing Research that Works rating scale visit: https://reachmilitaryfamilies.umn.edu/content/assessing-research-that-works