Neighborhood and Home Food Environment and Children's Diet and Obesity: Evidence From Military Personnel's Installation Assignment


SUMMARY: Researchers used previous data from The Military Teenagers' Environments, Exercise, and Nutrition Study (M-TEENS) to determine an association between the neighborhood food environment and children's dietary behaviors, body mass index, and weight gain in Army families. Results indicated that focusing only on the neighborhood food environment may ignore important factors that influence children's dietary behaviors.

KEY FINDINGS:

- Results suggested that neither the actual nor the perceived availability of particular food outlets in the neighborhood was associated with children's diet or body mass index.
- The availability of supermarkets and convenience stores in the neighborhood was not associated with where families shop for food or children's dietary behaviors.
- The healthiness of food available at home was associated with healthy dietary behaviors while eating at fast food outlets and restaurants were associated with unhealthy dietary behaviors in children.
- Parental supervision, including limits on snack foods and meals eaten as a family, was associated with healthy dietary behaviors.

IMPLICATIONS FOR PROGRAMS:

Programs could:

- Provide supportive classes for parents, offering them skills to engage with their children in ways that strengthen conversation on healthy eating
- Collaborate with community-based agencies that specialize in nutrition to better assist military parents with the importance of healthy dietary behaviors both inside and outside of the installation
- Develop online modules that focus on healthy activities military parents can engage in with their children

IMPLICATIONS FOR POLICIES:

Policies could:

- Support training of professionals who work with military families to ensure opportunities and accessibility to healthy food
- Develop health incentive plans for military families and their children to motivate healthy food environments
- Recommend installations include healthy eating opportunities, and in general, healthy eating environments

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METHODS
- Recruitment was conducted March to December 2013 via emails to the Service members' military email and mailings sent to their home address, which were obtained from the Defense Manpower Data Center.
- Participants completed surveys on measurements that included: body mass index, overweight factors, dietary behaviors, objective and perceived neighborhood food environment, family’s access to food, home food environment, and parental supervision.
- Through the data analyses, researchers also included other contextual variables that may influence dietary behaviors such as education level of both parents, number of children in the household, and residential location preference.

PARTICIPANTS
- Participants were Active Duty Service members in the Army, along with their teenage children. A total of 903 parent-child pairs were contacted and sampled from a previous study.
- Almost 41% of the sample were White (40.8%), 20.7% were Black, 24.6% were Latino, and 13.9% were other.
- The mean age of children was 13.2 years. There were no data given on parental age.

LIMITATIONS
- This study focused on a sample of Active Duty Army personnel and their children, and the findings may not generalize to the children of Service members in other branches of the military.
- There is not an in-text definition for ‘healthier food environments' within the study, which may limit the understanding and generalizability of the study.
- Only 58% of the sample had height and weight measurements completed which could skew the body mass index or obesity scales that were used within the study.

AVENUES FOR FUTURE RESEARCH
- Consider how families make decisions about what food to purchase, where to shop for food, how closely to monitor their children's food intake, and, ultimately how these decisions impact children's outcomes
- Explore and compare how families make decisions about what food is eaten at home when parental supervision is low and how this impacts children’s eating habits
- Examine the differences and similarities between other branches of the military to measure installation accessibility to healthy food options

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