Introduction

- 17% of children are obese-3X the proportion from one generation ago.¹
- Children eat more calories than they did several decades ago.²
- 50% of excess calories consumed by children come from sugar-sweetened beverages.²
- The environments where children spend time impact the number of calories they consume.³

Research Questions

1. What type of beverages are sold in park vending machines?
2. How does implementation of a municipal nutrition policy impact the types of beverages sold in park vending machines?

Study Overview: We analyzed the beverage content of park vending machines before and after passage of a nutrition policy in Carson, California. We also analyzed the beverage content of park vending machines in a comparison city, that did not implement a nutrition policy.

Study Design: Natural Experiment (Pre-Post design with comparison group)

Data Collection Strategy:
1. Carson (pre-policy period): Reviewed vendor records
2. Carson (post-policy period): Performed field observations of vending machines
3. Comparison city: Performed field observations of vending machines

Data Abstraction/Beverage Classification: Nutrition Environment Measurement Survey-Vending (NEMS-V)

Outcomes Measured:
1. Average vending machine proportion of green, yellow & red beverages
2. City-wide ratio of green/yellow to red beverages

Research Design & Methods

Results

1. In Carson, the mean vending machine proportions of red, yellow, and green beverages were 70%, 14%, and 16% before policy implementation
2. After policy implementation the mean vending machine proportions of red, yellow, and green beverages were 8%, 71%, and 21%.

1. In Carson, the ratio of green/yellow to red beverages was 1:2 before policy implementation and 11:1 after policy implementation.

Policy Implications

1. The findings of this study suggest that beverages sold in city parks can be a source of excess caloric consumption for children.
2. This study suggests that nutrition policies can have a significant impact on the types of beverages sold in city parks.

References


Conclusions

1. This study suggests that nutrition policies can have a significant impact on the types of beverages sold in city parks.

Acknowledgments

We would like thank the City of Carson for allowing us to do this work as well as the Built Environment Assessment Training Institute, The Robert Wood Johnson Foundation Clinical Scholars Program at UCLA, Arleen Brown, Robert Brook, Chi-Hong Tseng and D’Artagnan Scorza.