

Obesity has reached epidemic proportions in the United States, with one in three children classified as overweight or obese. Factors that have led to this epidemic are best understood by looking at the linked social and environmental context within which children live.

In 2009 CARE carried out a district-wide health survey for over 1,200 5th and 6th grade middle school students from twelve randomly selected New Haven Public Schools, also gathering height and weight information for each child. School environment was measured using six questions about feeling welcome and heard in school, having the opportunity for involvement at school for the student and the parent and trust in and support of teachers. This is an important age group, because it is when children are developing lifelong dietary and exercise habits. It is also the age when obesity doubles.

## Results

We wanted to understand the link between the school environment and children's health. A positive school is one that fosters a sense of belonging and engagement among students and has supportive educators who set high academic standards. We expected that a more positive school would be linked to lower student body mass index (BMI). We found a strong link between positive school environment and lower BMI. Specifically, for every 1 unit increase on the school environment scale, there is an associated 7 point decrease in the age and gender-adjusted BMI percentile ( $p=0.045$ ). This association was found even after controlling for race/ethnicity, age, gender, free or reduced school lunch and food insecurity.

## Recommendations

The school environment is an important context in a child's life- one that can have a big health impact throughout a child's lifetime. More research is needed to explore whether promoting a positive school environment is an effective strategy to prevent obesity. These findings support recent recommendations from the Institute of Medicine (May 2012): to "promote schools as the heart of health."

## Key Findings

- A positive school environment is one that fosters a sense of belonging and engagement among students and has supportive educators who set high academic standards
- A more positive environment climate is associated with a lower BMI percentile among students

