The Food Environment Through the Camera Lenses of 9- to 13-Year-Olds Living in Urban, Low-Income, Midwestern Households: A Photovoice Project
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ABSTRACT
Objective: To pilot Photovoice methodology with low-income, urban 9- to 13-year-olds to gain insight about their food environment and to determine whether this methodology was engaging and acceptable to them.
Methods: Photovoice methodology was used to allow children to represent their food environment. Twenty male and 9 female, low-income, 9- to 13-year-old children participated. Quantitative photograph analysis included quantity taken and usable internal/external and social environment and healthfulness categorizations. Qualitative analysis was conducted through open coding of interview transcripts.
Results: A total of 345 usable photos were taken by the children (n = 29), depicting both healthy and unhealthy foods. Four themes were identified (1) food characteristics; (2) social environment; (3) kitchen, cooking, and dining environments; and (4) food insecurity. Unhealthy food was most readily available to children. Children reported a lack of functioning kitchen equipment and multiple physical and environmental challenges to consuming a healthy diet. Food insecurity was prevalent. Food stamps and food pantries were used to fill gaps in the home food supply.
Conclusions and Implications: Photovoice can be effective in engaging children in conversation about their food environment and increases understanding of their experiences with food. Photovoice can provide insight into the household food environments. This information can be used to tailor interventions to better reflect the living environment and eating behaviors in low-income populations.
Key Words: Photovoice, food environment, children, low-income, food insecurity (J Nutr Educ Behav. 2015;47:437-445.)

INTRODUCTION
The food environment has an integral role in preventing or exacerbating childhood obesity. Children’s dietary habits are influenced by various aspects of their food environment, including home, school, after-school programs, and cultural factors.1-3 Environmental factors that affect children’s diets are interesting because they may have contributed to the increase in child obesity rates over the past few decades.4 Childhood obesity is of concern because of the increased risk of chronic diseases such as hypertension, type 2 diabetes, and hyperlipidemia.5,6 Low-income, ethnically diverse children are at a higher risk for obesity compared with moderate- to high-income Caucasian children.6,7 To improve the dietary habits of children living in low-income, urban households and reduce obesity rates, it is necessary to learn about the urban food environment from a child’s point of view, which may provide a more comprehensive understanding of the factors affecting their consumption patterns that might not otherwise be apparent.
Photovoice has been used to give a voice to populations by representing their experiences through photographs and interviews.8 This methodology was first used by Wang and Burris9 to study reproductive health in rural Chinese women (n = 62). Photovoice has been used effectively with different age and cultural groups.9-11 In London, Photovoice was used with children (n = 39) to determine how the environment influenced diet and physical activity; researchers found that children photographed their home, school, and neighborhoods as the places where they obtained food.12 In Canada, it was used to learn about factors affecting food choice among college students (n = 28); researchers found that the environment, cost, the media, and knowledge were influencing factors.13 In the US,
Findholt et al.14, 15 used Photovoice with rural Caucasian teenagers (n = 6) and found that limited access to healthy foods and promotion of unhealthy foods were barriers to a healthy diet. Research into the application of Photovoice with an urban, preadolescent population is needed.

Photovoice may be appealing to children because it is a creative way for their voice to be heard. Children use digital media on a regular basis; thus, incorporating photography into data collection methods may be more effective to engage children. Lambert et al.16 found that a combination of data collection methods, including visual methods, was most effective when conducting research with sick children (n = 4). Furthermore, Clark17 suggested that photography may provide researchers with the opportunity to build trust with children and Findholt et al.14 found that Photovoice promoted leadership in youth. Finally, Photovoice may attract children who are uncomfortable in group settings or with expressing their thoughts verbally.

Photovoice has been identified as a potentially effective but underused method for collecting health and nutrition data.12, 16, 18 The purposes of this project were to pilot Photovoice methodology with low-income, urban 9- to 13-year-olds to gain insight into their food environment and to determine whether this methodology was engaging and acceptable to them.

METHODS

This project used Photovoice methodology with 9- to 13-year-olds who lived in Supplemental Nutrition Assistance Program (SNAP)-eligible households in Minnesota. Recruitment took place at after-school programs. A contact person within the organization assisted in recruitment. Parental consent and child assent forms were completed before enrollment. Children received a small monetary incentive for their participation ($5 at enrollment, $5 when the camera was returned, and $5 after the interview). This study was approved by the University of Minnesota’s Institutional Review Board.

Data Collection

This study was conducted between May and August, 2013. Children met in small groups (2–5 children) to gather demographic data, measure height and weight, and explain proper camera use including the need to obtain consent from anyone they photographed. Social Cognitive Theory (SCT)19 was used as the theoretical framework for photographs. The authors selected SCT because it examines how interactions among environmental, personal, and behavioral factors can influence dietary behavior and SCT has been used for research with children successfully in the past.2, 20 Each child received a disposable camera (27 exposures) and was asked to take photographs of commonly consumed foods in the food environment including pictures at home, at school, and in the community, and of people who influenced food consumption. Children were provided examples for photography based on SCT: (1) the physical environment (cabinets, cupboards, the refrigerator, where food is prepared, and where food is consumed); (2) the social environment (with whom you eat and who prepares your food); (3) behavioral examples (how much food you eat and foods you eat most often); and (4) personal examples (favorite foods and taste preferences). The researchers collected completed cameras and developed the pictures.

Individual interviews were conducted with the children individually or in pairs within 2 weeks after the cameras were turned in to be developed. During interviews, children met with a trained interviewer to discuss 3–5 of their photos about which the researchers wanted to learn more (photos represented the environment, behavioral, and personal concepts of SCT). Interview questions included: (1) What is this picture of? (2) Tell me about what was happening when you took this picture? (3) How does this picture represent the food you eat? At the end of the interview, children were given the option to describe another photo of their choice and were asked to identify 1 photo that best described their food environment. Interviews lasted 10–30 minutes. To gather children’s opinion about using Photovoice, researchers asked each child how he or she felt about this project and whether he or she enjoyed taking photos at the end of the project.

Height and weight were measured for each child with outer clothing and shoes removed at the beginning of each focus group. A stadiometer (model 217, SECA, Chino, CA, 2008) was used to measure height and an electronic medical scale (Health-o-Meter 320KL, SECA) was used to measure weight. Standard weights were employed to calibrate the scale before each focus group. Standard procedures were followed to measure height and weight.21

Data Analysis

The researchers analyzed photographs quantitatively by recording the picture content of usable photos, and qualitatively by selecting 3–5 photos for each child to discuss with a researcher. For quantitative analysis of photographs, the total number of photos taken, usable photos, internal environment photos (kitchen and dining environment), external environment photos (restaurant, fast food, and dining), and social environment photos were recorded. Food shown in each picture was categorized as healthy or unhealthy following guidelines established by the US Department of Agriculture’s Economic Research Service.22 Frequency and descriptive data were analyzed from photograph coding, demographic information, and body mass index using SPSS for Windows Statistical Analysis Software Package (version 20.0, SPSS, Inc, Chicago, IL, 2012). Body mass index was calculated from actual height and weight data taken onsite and categorized using the Centers for Disease Control and Prevention growth charts.23

For qualitative analysis, all interviews were audio taped, transcribed verbatim, and reviewed by 2 researchers using open coding methods.24 Researchers independently read through and then coded each transcript. After coding transcripts, the researchers met to compare findings and identified themes and subthemes common across interviews.
RESULTS

Demographics

Of the 36 enrolled children, 29 (20 male and 9 female) completed the project. Children did not complete the project because they stopped attending the after-school program (n = 2), forgot to return the camera (n = 4), or reported the camera was lost (n = 1). Table 1 lists demographic information. Table 2 provides photo results. The feedback the researchers received from children about their experience with Photovoice was positive. When researchers asked children their opinion about the project, they reported that they enjoyed taking pictures and wanted to keep a copy of their photos. Each child was provided a copy of his or her photographs and 1 child started a diary of the photos she took.

Four themes were identified through the analysis and were present across interviews and photographs: (1) food characteristics; (2) social environment; (3) kitchen, cooking, and dining environments; and (4) food insecurity. Table 3 provides additional quotations. Using SCT as the theoretical framework, it appears that environmental factors, both social and physical, were strongly represented in the children’s photography and discussions. The social environment, household physical environment (kitchen, cooking, and dining), and food insecurity themes demonstrate this.

Food Characteristics

There were two subthemes under food characteristics; types of food and rationale for photographed foods. Foods were categorized as ‘healthy’ or ‘unhealthy’ using the Economic Research Service guidelines. Using these guidelines, ‘healthy’ foods contain at least half of a portion size of one major food group (fruit, vegetable, dairy, grains, and protein) and a moderate amount of saturated fat, sugar, and sodium.

A wide variety of foods were represented in the photographs. Of the usable photos, 79 photos represented healthy foods, 54 represented unhealthy foods, and 92 depicted a mixture of healthy and unhealthy foods (Figure 1). Healthy foods included those from all food groups (bread, sticky rice, strawberries, bananas, broccoli, chicken, milk, and cheese). Unhealthy foods included cakes, cupcakes, Doritos, Takis, Cheetos, ramen noodles, ice cream, bacon, chicken nuggets, a variety of candy, and soda. Flavor enhancers such as mayonnaise, salad dressing, barbecue sauce, and hot sauce were also photographed. Foods with multiple ingredients that were categorized as mixed foods included macaroni and cheese, peanut butter and jelly sandwiches, cold cut sandwiches, and pizza. Furthermore, children took photographs of ethnic foods consumed in their households, including sushi, sticky rice, egg rolls, and soul food (ribs, fried chicken, and cornbread).

Table 1. Demographic Information for Children Participating in Photovoice Project in Minnesota (n = 29)

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>n</th>
<th>Mean ± SD or %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Child’s age, y</td>
<td>29</td>
<td>11 ± 1</td>
</tr>
<tr>
<td>Child’s grade</td>
<td>29</td>
<td>5 ± 1</td>
</tr>
<tr>
<td>Household size, n</td>
<td>29</td>
<td>5 ± 1</td>
</tr>
<tr>
<td>Children in household, n</td>
<td>28</td>
<td>3 ± 1</td>
</tr>
<tr>
<td>BMI for age (%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Boys</td>
<td>20</td>
<td>62 ± 34</td>
</tr>
<tr>
<td>Girls</td>
<td>9</td>
<td>85 ± 19</td>
</tr>
<tr>
<td>Child’s gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Boy</td>
<td>20</td>
<td>69%</td>
</tr>
<tr>
<td>Girl</td>
<td>9</td>
<td>31%</td>
</tr>
<tr>
<td>Child’s race/ethnicity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>African American</td>
<td>18</td>
<td>62%</td>
</tr>
<tr>
<td>Caucasian</td>
<td>4</td>
<td>14%</td>
</tr>
<tr>
<td>Native American</td>
<td>4</td>
<td>14%</td>
</tr>
<tr>
<td>Asian</td>
<td>3</td>
<td>10%</td>
</tr>
<tr>
<td>Child’s weight category</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Underweight</td>
<td>1</td>
<td>3%</td>
</tr>
<tr>
<td>Normal weight</td>
<td>14</td>
<td>48%</td>
</tr>
<tr>
<td>Overweight</td>
<td>4</td>
<td>14%</td>
</tr>
<tr>
<td>Obese</td>
<td>10</td>
<td>35%</td>
</tr>
</tbody>
</table>

Table 2. Average Number of Photographs Taken by Each Child Participating in Photovoice Project, by Category (n = 29)

<table>
<thead>
<tr>
<th>Photo Category</th>
<th>Mean</th>
<th>SD</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>17</td>
<td>6</td>
<td>3–27</td>
</tr>
<tr>
<td>Usable</td>
<td>13</td>
<td>6</td>
<td>1–25</td>
</tr>
<tr>
<td>Healthy food</td>
<td>3</td>
<td>3</td>
<td>0–8</td>
</tr>
<tr>
<td>Unhealthy food</td>
<td>2</td>
<td>2</td>
<td>0–11</td>
</tr>
<tr>
<td>Mixed food</td>
<td>3</td>
<td>3</td>
<td>0–13</td>
</tr>
<tr>
<td>Home</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kitchen</td>
<td>3</td>
<td>4</td>
<td>0–13</td>
</tr>
<tr>
<td>Dining</td>
<td>2</td>
<td>2</td>
<td>0–7</td>
</tr>
<tr>
<td>External</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dining</td>
<td>2</td>
<td>3</td>
<td>0–11</td>
</tr>
<tr>
<td>Peer or sibling</td>
<td>3</td>
<td>3</td>
<td>0–11</td>
</tr>
<tr>
<td>Adult</td>
<td>1</td>
<td>1</td>
<td>0–5</td>
</tr>
</tbody>
</table>
One child stated, “I’m part Italian so my mom, my sister, and I make meatball subs.”

Children explained the reasons why they photographed certain foods as a favorite food, typical meal or snack, special food to them, cultural/family food, or food they ate often. A child photographed her meal, which included cornbread and salad, to “fill my stomach up just in case I am not all the way filled up” after finishing her macaroni and cheese.

### Social Environment

Two subthemes under social environment were parental influence and peer/sibling influence.

Most photographs of an adult (n = 16) were of the child’s parent. Parents had a strong impact on children’s home food environment. Children ate with their parents and ate foods prepared by them, and parents determined the types of foods available in the household based on what they purchased at the store or chose at the food shelf (food pantry). Parents’ health also influenced their food choice, as demonstrated by 1 child: “My mama and dad have ... high blood pressure, well not my mom but my dad because my dad likes a lot of salt ... but now he’s cutting down.” Parents determined where children consumed their meals and many family meals took place while watching television.

Parents also influenced children’s cooking ability and introduced new foods to their children. One child reported that his dad taught him to grill (Figure 2). Another prepared macaroni and cheese with her mom and she “loved to help.” Yet another child described his role preparing a turkey: “Me and my dad cut it up and I was skinning it. I started cooking it, me and my mom, actually.”

Eighty-five photos captured a peer or sibling both at home and at community programs. At home, children reported eating with their siblings more often than with their parents. Children received cooking education from their siblings and peers. One child described this: “I was, like, 6 or 7 when he [brother] taught me how to cook eggs or bacon ... and he taught me how to make pancakes.”

One explained that his friend taught him how to make a fried egg. Another photographed his sister making lunch together.

### Table 3. Selected Quotations From 29 Children Using Photovoice: Food Environment Project by Theme

<table>
<thead>
<tr>
<th>Theme</th>
<th>Quotation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1: Food characteristics</td>
<td>“I like to eat chicken soup; it just feels good going through your body.” “I will eat fried eggs every day.” “My little brother will go crazy for ice cream ... sometimes he can go for 5 days nonstop in a tantrum crying for ice cream. ... He dreams about it.” “You have to do the seaweed thing and then cucumber, shrimp ... sticky rice and [avocado] ... then you have to do the rice sheet thing and then you cut it.”</td>
</tr>
<tr>
<td>2: Social environment</td>
<td>“We don’t usually eat at the table because we really can’t usually fit our mom in there because she’s in, like, a wheelchair ... I don’t think most people have, like, family dinner.” “We [my family and I] usually just sit around the living room and watch [television shows]: Grim, Revolution, or The Voice.”</td>
</tr>
<tr>
<td>3: Kitchen, cooking, and dining environments</td>
<td>“We all ... share at least 2 or 3 bowls [of food], so we divide them up, half for 1 side of the table and the other half and the ones that eat in the living room.” “[Ate lunch at] a whole table with friends.”</td>
</tr>
<tr>
<td>4: Food insecurity</td>
<td>“My fridge is kind of full.” “Every Sunday my dad goes to the food shelter so we get food and stuff.”</td>
</tr>
</tbody>
</table>

Figure 1. Theme: food characteristics. Child stated, “I got some orange juice, but I don’t like pulp,” she likes ginger ale because “it’s fizzy,” and the lemonade was “bought at the store in a can.”
Kitchen, Cooking, and Dining Environments

Subthemes under kitchen, cooking, and dining environments included the home and community environments.

Children took 92 photos of their kitchen and 58 photos of their dining environment. Kitchen environment photos focused on appliances and food storage. Food in the refrigerator photos included meats, fruit, and beverages. Photos of vegetables were limited to carrots and tomatoes. Cupboards and pantries ranged from empty to full and held cereal, bread, and ramen noodles. Children also photographed their cooking appliances, including the microwave, stovetop, and oven, a George Foreman grill, and an outdoor grill. The microwave was the most commonly reported cooking appliance and was used to heat leftovers. Examples of food children prepared were eggs, ramen noodles, hot dogs, bacon, burgers, egg rolls, sushi, and meatloaf. All children had basic cooking equipment available except 1 child who was residing in a shelter. She discussed the challenges to food preparation because of the lack of appliances in the shelter: “He [my cousin] loves Wendy’s ... but we can’t cook so we go and get some food from there.” The dining environments that children photographed included a dining room table, an eat-in kitchen, their bed, and a counter-top (Figure 3).

A total of 58 photos were taken of children dining outside their home and the majority were taken at the after-school program. Boston Market was the only restaurant captured in the pictures. In interviews, children reported they ate at Wendy’s, Old Country Buffet, Chinese buffets, and pizza restaurants. At the after-school program, children consumed food prepared at the program and dined at tables in groups. They ate with friends and frequented the ice cream truck in the summer. Children also attended summer school and ate lunch there 3 d/wk. The school food environment extended to the bus; 1 child illustrated, “that’s why [the cook] likes me, because I don’t waste food.” Another child described taking food from a buffet to be eaten at a later time:

\[I love the sweet and sour chicken they serve, like every day I go there I have to bring my sweatshirt … I don’t care if it’s a hundred degrees. I fill my pockets with these sweet and sour chicken things.\]

Children who did not have a refrigerator or freezer in their household used alternative forms of food storage; a girl described her food storage: “We put it in, like, a cooler but it’s just foam and then you put ice in it and then the food.”

DISCUSSION

This research demonstrates that Photovoice can engage low-income children in a conversation about their diets. Main findings from this research were that: (1) children were most influenced by their parents and peers, and their parents determined what foods were available in the household and provided cooking education, whereas peers and siblings were most involved at mealtimes; (2) the availability of cooking equipment and food storage were the environmental factors that affected children’s diets; (3) school, the school bus, after-school programs, fast-food...
restaurants, and buffets were integral parts of their food environment; and (4) concerns about food security were widespread.

Food Characteristics

The current study showed that a variety of healthy and unhealthy foods were consumed by the children. Whereas healthy foods were photographed more, children reported that they liked processed, prepackaged, high-sugar, or high-fat, low-cost foods more and that they consumed them more often. To illustrate, in Figure 2, a greater amount of soda was pictured and the child verbalized that it was consumed more often than the healthier, more expensive beverage, milk. Research has found low income is associated with low–nutrient-dense food intake and poor-quality diets. Wiig and Smith found children consumed Kool-Aid instead of milk or juice because Kool-Aid was less expensive. Although healthy foods were photographed, they were not discussed in interviews as often as unhealthy foods. Research has shown that children enjoy fruit but its availability is limited in low-income households. The high frequency of high-calorie, low–nutrient-dense foods available to children may have contributed to weight gain and overweight in the current study’s population.

Social Environment

Children depended on their parents to determine what foods were available at home. Other research has also shown children prefer to eat food with which they are most familiar, and because parents have a strong influence on the foods to which their children are exposed on a daily basis, they have an integral role in shaping their child’s dietary preferences. Families also taught cultural practices to their children. Native American children in the current study reported their parents taught them to hunt, prepare, and cook wild game. The importance of family in Native American communities has been highlighted in previous research. African American children in the current study were influenced by their families through the inclusion of soul food in their diets. Children reported consuming macaroni and cheese, ribs, and cornbread. Previous research with a predominantly African American sample of homeless children also found that soul food was important but was limited because of environmental constraints in the homeless shelter. Results from this study suggest that encouraging parents to make healthy foods more available at home and to introduce healthy new foods could improve the likelihood that children would try and accept healthy foods. Maintaining cultural practices in food preparation is important when offering healthier methods of preparing cultural foods.

Figure 3. Theme: kitchen, cooking, and dining environment. “My mom took a picture of me eating this pasta. It’s really good pasta. It’s Alfredo and I had my hair braided and this is our table. We put stuff on it that we need. That’s my juice and my dad’s hat and my dad’s watch and stuff.”

Figure 4. Theme: food insecurity. Photograph of child’s refrigerator.
Kitchen, Cooking, and Dining Environments

Children in this study photographed available kitchen appliances and food storage areas and used the microwave most often to prepare foods. The most notable photographs were of food storage because of the variable amount of food kept at home and the limited healthy food available. One child living in a shelter was limited to the top of a dresser for her food storage (Figure 3) and regularly consumed foods at nearby fast-food restaurants. Richards and Smith also found that the environmental constraints of limited food storage and a lack of healthy food choices available within walking distance of shelter-dwelling families were challenges to obtaining healthy food. In rural Oregon, Findholt et al used Photovoice with high school students and also found that access to healthy foods was a concern for this population. Participants photographed the produce section in their local grocery store to illustrate the lack of healthy foods available. This population had access to fruits and vegetables through agriculture and gardens that the urban sample in the current study did not.

Children in this study ate at school and the after-school program multiple times per week. Children reported limited healthy options at school, which can lead to an increased calorie intake. Briefel et al found that children who participated in the National School Lunch Program consumed more calories at school than did nonparticipants, which may lead to weight gain in low-income children. In addition, children reported consuming snacks such as Doritos on the school bus. Rossen et al reported that children who walked to school gained less weight when healthy choices were available on their route to school. Little research has addressed the types of food consumed on the school bus; this research is needed because these snacks may not be accounted for in children’s diets, but they can add a significant amount of excess calories and cause weight gain.

Food insecurity

Children in this study reported SNAP and food shelf use and discussed the financial constraints that limited their food choices. Photographs corroborated the children’s reports and enhanced the narrative data by providing visual evidence of the lack of food available in some households. Previous research has shown that food shelves are used by low-income families to meet their basic daily food needs. The majority of foods provided at food shelves are less healthy, high-sodium options that are nonperishable, canned, bagged, or boxed items. Ethnic foods are generally not available at food shelves and may cause families to alter their cooking and eating habits. It is necessary to consider food shelves when looking at the food environment of low-income children because families rely on food shelves on a regular basis and foods available there have become staples in their diets. Food stamps, or SNAP, were another way children’s food needs in this study were met and more food was available at home when their parents had more food stamps available. In a sample of low-income women, Wiig and Smith found that SNAP benefits do not last all month, and therefore, food options were more limited at the end of the month than at the beginning. The current infrastructure that provides food to low-income families may not be supportive of a healthy diet.

The children also discussed how they coped with food insecurity, including hoarding food from buffets and not wasting the food they were served. It is possible that lack of food and food options at home may have taught children to visually determine the amount to eat instead of following their internal satiety cues. Previous research has found that children overeat as a coping mechanism to avoid hunger among the poor. Reports of children hoarding food in food-insecure households has been documented in children as young as preschool age. This research adds to the data in the area of food insecurity by capturing children’s experiences of limited food availability in their households. Photography may be an easier way for children to describe food insecurity, but further research is needed.

Limitations

Although results are not generalizable to all children living in low-income households, these data provide insight into the food environment experienced by a section of the population that can be used as baseline information for future research. Also, possibly because of the study’s focus on youth and their lack of experience with disposable cameras, there were instances in which children photographed the same object more than once. To gather the most accurate data in these cases, researchers conducted interviews after building rapport with the children. The sample size may seem small but it is appropriate for qualitative studies, and previous Photovoice studies have had sample sizes from 4 to 62. Future studies with this population may consider using the US Department of Agriculture Food Security questionnaire, but care will need to be taken so that children’s photo choices and interviews are not biased because of the discussion about food security.

IMPLICATIONS FOR RESEARCH AND PRACTICE

These findings contribute to the literature on children’s dietary choices by using Photovoice to depict the environmental, social, and personal challenges children living in low-income households face to consume a nutrient-dense diet. The findings suggest that the diet of the entire family must be addressed before any changes in the individual child’s diet can occur. Also, functioning appliances and designated places for mealtime (dining tables and chairs instead of couches and beds) could improve the mealtime experience for these children. Food insecurity was a barrier to healthy eating and diets often depended on food stamp availability.
and the options at the food shelf. Finally, the researchers received positive feedback from the children about Photovoice. This method may be an effective technique to conduct formative research to inform obesity prevention and intervention strategies. For example, cameras can be provided to children to take pictures of their favorite foods. Once developed, these photos could be used to open discussion about food choices or they could be used to create a cooking demonstration to modify their food choices to make them healthier.

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REFERENCES
CONFLICT OF INTEREST

The authors have not stated any conflicts of interest.