**Introduction**

- Childhood obesity is indicated by body mass index (BMI) for age and sex at or above the 95th percentile.
- Over the last decade, childhood obesity has doubled.
- More than one third of children in the United States are now overweight or obese.
- The increasing prevalence of obesity in children and adolescents in the US parallels surges in food marketing with youth exposed to over 5000 food commercials annually.
- The current study examined youth responses to differing types of food logos.

**Methods**

**Procedure**

- As part of a validation study, 7 healthy weight and 20 obese youth were recruited from Healthy Hawks, an educational/behavioral weight management program.
- Participants were asked to name and rate 115 food and 124 non-food logos on familiarity, valence (positive/negative), and arousal (bored/excited).
- A difference score was calculated (healthy food logo recognition minus junk food recognition) as determined by Arredondo et al. (2009).
- As youth were viewing logos on a laptop and assigning ratings, response times were recorded by Eprime.

**Results**

**Participant Characteristics**

- N = 27
- Gender:
  - Male   11 (40.7%)
  - Female 16 (59.3%)
- Mean age: 11.4 years (SD = 2.2)
- Weight Classification
  - Obese        20 (74%)
  - Overweight and Healthy weight   7 (26%)

**Statistics**

**Pearson Correlation Matrix among Age and Logo Identification**

<table>
<thead>
<tr>
<th>Restaurant Logo Identification</th>
<th>Junk Food Logo Identification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>Age</td>
</tr>
<tr>
<td>.438*</td>
<td>.502**</td>
</tr>
</tbody>
</table>

*p < 0.05  **p < 0.01

**Pearson Correlation Matrix among BMI, Difference Score, and Logo Response Times**

<table>
<thead>
<tr>
<th>Difference Score</th>
<th>Valence Response Time</th>
<th>Arousal Response Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>BMI</td>
<td>.406*</td>
<td>-.595**</td>
</tr>
</tbody>
</table>

*p < 0.05  **p < 0.01

**Discussion**

- Preliminary results indicated that adolescent females recognize more food logos than males.
- In addition, with age, youth are able to identify more food logos.
- Increases in BMI are associated with increased identification of junk food versus healthy food logos.
- Obese youth rate happiness and interest/excitement with food logos with faster reaction times than healthy weight children.
- These measures may provide a more comprehensive depiction of branding’s impact on a child’s familiarity and emotional response to foods.

**Limitations**

- Generalizability is limited due to sample size and unequal distribution of healthy weight and obese children.
- Results of this study may not entirely represent the overall effect of advertising, due to the multifaceted nature of commercials.

**Future Research**

- The correlation between BMI and difference scores as well as BMI and logo ratings should be examined using larger, more diverse samples.
- Additional research should examine the relationship between levels of impulsivity, BMI, and the speed at which youth are identifying and rating logos.
- Future studies should investigate gender differences in exposure to food logos.