BACKGROUND:

- Low fruit and vegetable consumption are leading predictors of childhood obesity.¹
- Nationally, over 50% of preschoolers do not eat the recommended servings of fruit and almost 80% do not eat the recommended servings of vegetable.²
- While behavioral interventions are an effective means to increase fruit and vegetable consumption, there is little research on the effect of health literacy on fruit and vegetable consumption among preschool age children.³

METHODS:

- A summative evaluation was conducted using pre/post-test surveys.
- A 23-item survey was used to record preschool students’ ability to identify two fruits and two vegetables.
- Survey was used to record the number of students that consumed the fruits and vegetables after identifying the items.
- Potential factors that may influence preschooler’s participation such as emotional state and the amount of time since the last feeding was recorded.
- The evaluation was conducted with 284 preschool students at six school sites in Hartford, CT (summer of 2012)

RESULTS:

Aim 1
Overall, preschoolers that participated in the health literacy program had an increase in ability to recognize common fruits and vegetables (Table 1).

Aim 2
At post-testing, students’ ability to identify fruit correlated with consumption of the fruit [strawberries r(20)=.44, p<.05, blueberries r(20)=.14, p<.05]

The correlation between vegetable recognition and consumption was non-significant [broccoli r(20)=-.275, p=n.s., carrots r(20)=.006, p=n.s.]

TABLE 1: Fruit and Vegetable Recognition

<table>
<thead>
<tr>
<th></th>
<th>Pre-test scores</th>
<th>Post-test scores</th>
</tr>
</thead>
<tbody>
<tr>
<td>Broccoli</td>
<td>72</td>
<td>68</td>
</tr>
<tr>
<td>Strawberries</td>
<td>71</td>
<td>70</td>
</tr>
<tr>
<td>Blueberries</td>
<td>69</td>
<td>79</td>
</tr>
<tr>
<td>Carrots</td>
<td>68</td>
<td>78</td>
</tr>
</tbody>
</table>

CONCLUSIONS:

Similar to other school based health programs with older children, our health literacy program was not able to successfully impact vegetable consumption.³ However, at the classroom level exposure to a health literacy program may increase preschoolers ability to recognize fruits and vegetables. Moreover, fruit recognition can be an effective means to increase fruit consumption among preschool aged children. Future research should evaluate changes at the student level.