

Objective: Children do not eat the recommended amounts of fruits and vegetables (FV). Salad bars have been shown to increase children's selection and consumption of FV in school; subsequently the Let's Move campaign focuses on expanding the number of schools offering salad bars. The objective of this study was to describe elementary children's choices from a school salad bar. It was hypothesized that more children would choose FV than the non-fruit and vegetable offerings. Furthermore, children would choose a greater number of FV in comparison to the number of non-fruit and vegetable items selected.

Methods: Digital imaging was used to capture images of students' (grades 3-5) lunch trays (n=151) over three visits to one elementary school from 2011-2012. Images were analyzed to determine the frequency of certain salad bar foods and to quantify the selections.

Results: Of the 151 trays imaged, 86 (57%) contained a selection from the salad bar; nearly half contained a fruit (41.9%), vegetable (48.8%), or non-fruit or vegetable (46.5%). Only 15.1% of students chose both a fruit and vegetable, while 46.5% chose a non-fruit or vegetable ($p<0.001$). However, more students chose a fruit or vegetable (75.6%) than a non-fruit or vegetable ($p=0.003$). Children selected larger numbers of fruits or vegetables (not FV) compared to non-fruit or vegetable items ($p<0.001$).

Conclusions: While children are not selecting both fruits and vegetables from a salad bar, they are choosing a fruit or vegetable more frequently than non-fruit or vegetable items, as well as in greater numbers. Prior to the 2012 USDA rules requiring children to select a fruit or a vegetable, most children selected a fruit or a vegetable from the salad bar, however nearly 25% did not. Further research is needed on salad bars to increase children's familiarity with FV to encourage selection and consumption.