

## Candy or Fruit? Measuring the Impact of Michelle Obama on Healthy Eating Choices

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### Abstract

In a field experiment conducted during trick-or-treating at Halloween, we find that a visual cue of Michelle Obama prompts almost twice as many children age 9 and over to choose fruit over candy, compared to a visual cue of Ann Romney. This provides evidence that Michelle Obama's campaign to promote healthy eating has succeeded in influencing behavior. No such evidence was found for children age 8 and below.

### Paper

Childhood obesity has risen considerably in the United States, from 5 percent in the 1970s to 17% in 2008. Obesity generates negative externalities through increased burden on the health care system and lower workplace productivity, and of course leads to lower life expectancies. To combat this trend, Michelle Obama adopted health living as her prime activity as First Lady of the United States. The effort, captured by Lets Move (<http://www.letsmove.gov>), is a multi-faceted attempt to increase knowledge and change attitudes and social norms regarding health eating and exercise.

Naturally, there have been many campaigns to increase knowledge and change attitudes and social norms on such matters. Measuring the impact of any one campaign is difficult, since the channels for campaigns of this sort are typically diffuse, with difficult to control boundaries. We use an attention-enhancing technique to understand the impact Michelle Obama has had in shifting not merely attitudes but actual choices children make. To do this, we ran the following experiment during Halloween trick-or-treating: children were randomly assigned to one of two sides of a porch. At both sides, they were asked whether they would prefer fruit or candy. One side of the porch had a large photo of Michelle Obama in front of them as they were making their decision. The other side had a photo of Ann Romney. Other posters were taped to the wall that said either "Obama" or "Romney" on the respective sides of the porch. 164 children were in the study. Students were randomly assigned by an administrator, who on their approach to the porch handed them a numbered piece of paper from a bag.

We find providing a visual cue to children to make them think about Michelle Obama (consciously or subconsciously we do not conjecture), children 9 years old and over are 19 percentage points more likely to choose fruit (38% versus 19%, p-value = 0.11). The effect was not present on children 8 years old and below, presumably because they were less aware of the Michelle Obama's personal involvement in the health living campaign, or also less likely to be aware of who Michelle Obama is.

Further research is needed to understand whether the lack of impact on children 8 and below is an indication of true void of impact from the health eating campaign, or if merely the association of Michelle Obama to the campaign is weak or nonexistent amongst young children. Note that our design provides no way of testing separately an alternative hypothesis: rather than Michelle Obama's presence having triggered the choice of fruit over candy, Ann Romney's presence may have triggered the reverse, the choice of candy over fruit. We leave that question to further research.

The external validity of this study to everyday eating habits would require several leaps of faith. Thus while this study should not be used to argue singlehandedly for government or philanthropic funding of healthy eating campaigns, it could be used to whet one's appetite for more rigorous evaluations of health eating campaigns.

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**Figure 1: Effect of Michelle Obama on Healty Eating Choices**

