

## Introduction

### Picky Eating

- Defined as the unwillingness to eat unfamiliar foods or to try new foods while having strong food preferences for a limited number of foods (Taylor et al., 2015)
- Has been associated with malnourishment, weight status problems, and psychopathological problems (Brown et al., 2016; De Barse et al., 2015; Zucker, 2015)

### Unhealthy Food Marketing to Youth

- Youth are exposed to an average of 4,700 food commercials a year (Shehan & Harris, 2015) and 84% of these are for foods high in sugar, saturated fat, and sodium (Powell et al., 2013)
- Children exposed to large amounts of food marketing are at higher risk of poor diet and obesity (Zimmerman, 2011)

### Race

- There is evidence that companies specifically target Black children by purchasing advertising on media that have a large proportion of black viewers. (Fleming-Milici & Harris, 2016)
- Black children view approximately 50% more advertisements than their white counterparts (Fleming-Milici & Harris, 2016)

### Income

- Some studies show that picky eating is more prevalent in low income families. (Machado et al., 2016)

### The Current Study

- The Rudd Center conducted a Parental Survey Questionnaire in 2015 to assess parents' attitudes about food marketing and support for policies to limit food marketing to children.
- The present study uses data from this survey to:
  - measure the relationship between income, race, food marketing, and reports of picky eating in a national sample of parents
  - examine which of these factors impact the probability of having a picky eater in the family

### Hypotheses

- Parents of black children will report that their children have higher exposure to food marketing than parents of white children
- Children who have been exposed to more food marketing will have higher rates of picky eating.

#### References

Brown, C. L., Vander Schaaf, E. B., Cohen, G. M., Irby, M. B., & Skelton, J. A. (2016). Association of Picky Eating and Food Neophobia with Weight: A Systematic Review, *Childhood Obesity*, 12(4). doi:10.1089/chi.2015.0189

De Barse, L. M., Tiemeier, H., Leermakers, E. T. M., Voortman, T., Jaddoe, V. W. V., Edelson, L. R., ... Jansen, P. W. (2015). Longitudinal association between preschool fussy eating and body composition at 6 years of age: The Generation R Study. *International Journal of Behavioral Nutrition and Physical Activity*, 12(153). doi:10.1186/s12966-015-0313-2

Powell, L. M., Schermbeck, R. M., & Chaloupka, F. J. (2013). Nutritional content of food and beverage products in television advertisements seen on children's programming. *Childhood Obesity*, 9(6), 524-531.

Shehan, C. V. & Harris, J. L. Trends in television food advertising to young people: 2014 update. Rudd Report.

Taylor, C. M., Wernimont, S. M., Northstone, K., & Emmett, P. M. (2015). Picky/fussy eating in children: Review of definitions, assessment, prevalence and dietary intakes. *Appetite*, 95, 349-359. doi:10.1016/j.appet.2015.07.026

## Methods

### Participants

- Survey respondents included 898 parents between 21 and 65 years old and all had children between the ages 2 and 17 years old living at home

		n	%
Race	White	389	43
	Black	180	20
	Hispanic	284	32
Income	Low	296	33
	Middle	339	38
	High	263	30
Age (years)	2 to 5	241	22
	6 to 11	445	40
	12 to 17	406	38

### Procedure

- A survey company that has access to a diverse, national sample conducted this 20 minute web-based survey

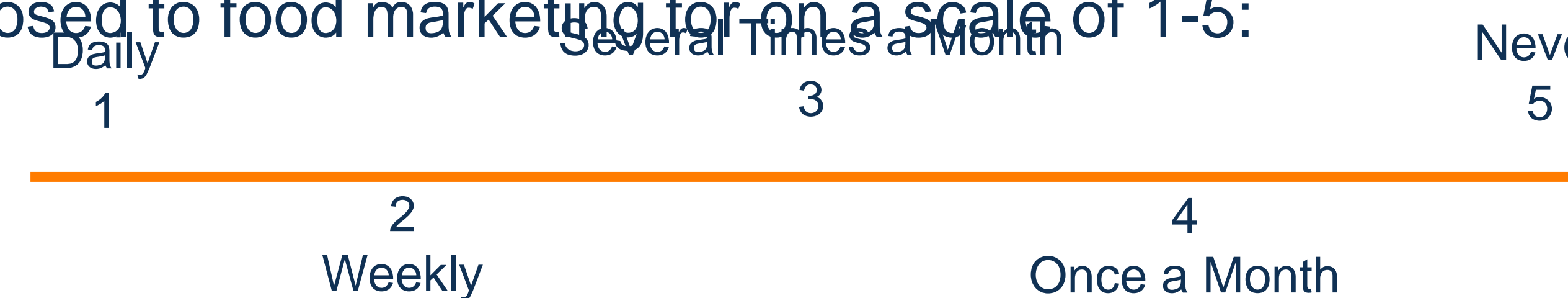
### Measures

#### Demographic Questions

- Number of children, ages of children, children's race and ethnicity

#### Perceived food advertising exposure

- Assessed often participants believed their each of children were exposed to food marketing for on a scale of 1-5:



- If parents answered daily, they were then asked how many times a day (1-3 ; 4-9 ; 10 or more times a day)
- If parents answered weekly, they were asked to specify how many times a week (once a week ; 2-3 times a week ; 4-6 times a week)

#### Perceived picky eating

- Parents were asked to categorize each child's eating as: picky, average, or experimental
- Because many respondents had multiple children, a binary family level variable was crated to indicate if there was or was not a picky eater in the family

#### Analyses

- Crosstabulations and correlations were conducted to assess the relationship between race, income, and parental perception of children's exposure to unhealthy food marketing and children's

## Results & Discussion

### Results

#### Race

- A chi-square test was used to test whether the proportion of picky eaters in a family differed by race.
- Black parents were significantly more likely to report that they had child who was a picky eater than white and Hispanic parents
- Black parents reported 50% of their children being picky compared to 36% of whites and 42% Hispanic  
 $\chi^2(2) = 9.53, p < .01$

#### Unhealthy Food Marketing

- The variable measuring exposure to unhealthy food marketing was not normally distributed. Therefore, Kendall's tau\_b was used.
- Families with a picky eater in the family reported significantly greater exposure to food marketing  
 $\tau_b = .058, p < .05$

#### Income

- The relationship between family income category and having a child who was a picky eater was not significant.  $\chi^2(2) = 1.31, p = .52$

	B	SE	Wald	Odds Ratio: 95% CI		
				Odds Ratio	Lower	Upper
Constant	-.108	.256	.256	.898		
White			6.017			
Black	.464	.190	5.981	1.590*	1.096	2.306
Hispanic	.204	.170	1.448	1.226	.880	1.710
Exposure to unhealthy food advertising	.000	.000	1.581	1.000	1.000	1.000
Income	-.017	.039	.176	.984	.911	1.062

\*p < .05

#### Predicting the Likelihood of Picky Eating

- A logistic regression to assess the predictive value of race and exposure to marketing for the likelihood of having a picky eater was statistically significant  
 $\chi^2(5) = 26.33, p < .0005$
- Our study showed that black parents were more likely to report their child as a picky eater compared to whites or Hispanics
- When race was added into the model, there was no longer a relationship between food marketing and picky eating.

### Discussion

- Black parents believed they had more picky eaters than their white and Hispanic counterparts.
- More research is needed to determine why black parents were more likely to report that their children were picky eaters.