

# Maternal feeding style and children's snack food selections: An observational study



Allison Doub Hepworth, MS<sup>1</sup>, Kameron J. Moding, PhD<sup>2</sup>, and Cynthia A Stifter, PhD<sup>1</sup>

<sup>1</sup>Penn State University <sup>2</sup>University of Colorado Denver Anschutz Medical Campus

## Background

More research is needed to explain the mechanisms underlying associations between maternal feeding style and child weight status.<sup>1</sup>

Children whose mothers have an indulgent feeding style control their own eating behavior (e.g., what, where, when, and how much they eat) and are at a higher risk for obesity.<sup>1,2</sup>

There is some evidence that indulgent feeding is positively associated with children's consumption of energy dense foods.<sup>3,4</sup>

This study builds on previous research by using an observational measure of child control over food choices and preschool children's snack food selection.

## Research Question

What is the relationship between child control over food choices and the quality of children's snack food selections at 4.5 years of age?

**Hypothesis:** Child control will be positively associated with the number of unhealthy snack food selections.

## Methods

### Participants

82 predominately white, highly educated mothers and their 4.5-year-old children (Male,  $n = 43$ ) participated in a laboratory visit.

### Conflict Over Food Choices Task

Mother-child dyads were instructed to work together to select up to five snacks for the child to have available during the laboratory visit from 9 options:

Healthier Snacks	Less-Healthy Snacks
1. Small apple	1. Small piece of candy
2. Applesauce cup	2. Cinnamon bun
3. Popcorn	3. Cookies
4. Carrots	4. Fruit roll up
	5. Potato chips

### Observational Coding

A 'child control' coding scheme was developed based on the 'Comprehensive Feeding Practices' questionnaire.<sup>5</sup> Scores ranged from none (0) to complete (4; ICC = 0.80).

### Analyses

Descriptive statistics were calculated for all study variables. One-way ANOVAs tested for mean differences in the number of healthy and less-healthy snack food selections by child control.

## Results



Most dyads (85%) selected 5 snacks and included both healthier ( $M = 2.16$ ,  $SD = 0.88$ ) and less-healthy options ( $M = 2.56$ ,  $SD = 0.88$ ).

Child control was observed to be shared (20%), high (29%), or complete (51%).

When child control was high or complete versus shared, ~1 fewer healthy snacks [ $F(2,79) = 4.93$ ,  $p = .01$ ] and ~1 more less-healthy snacks [ $F(2,79) = 4.68$ ,  $p = .01$ ] were selected.

## Conclusions

In the majority of cases, 4.5-year-old children were given high or complete control over their snack food selections, which resulted in less nutritious snack options available for children's later consumption.

Over time, allowing young children control over their food choices when highly palatable, energy-dense foods are available may increase children's risk for developing obesity because children are apt to select these foods.

## References

1. Shloim, Edelson, Martin, & Hetherington. (2015) *Frontiers in Psychology*, 6
2. Hughes, Shewchuk, Baskin, Nicklas & Qu. (2008). *Developmental and Behavioral Pediatrics*, 29(5)
3. Hoerr et al. (2009). *International Journal of Behavioral Nutrition and Physical Activity*, 6
4. Kiefner-Burmeister, Hoffmann, Meers, Koball, & Musher-Eizenman (2014). *Appetite*, 74
5. Musher-Eizenman & Holub (2007). *Journal of Pediatric Psychology*, 32(8)

