

Background

Parents directly influence their children's dietary intake by determining their eating environment. Studies rarely investigate how different parent feeding styles relate to children's diet quality.

Purpose

To examine the relationship between parent feeding styles and the diet quality of Head Start preschoolers' dinner meal.

Methods

Participants

Families with children attending preschool at Head Start Centers in Houston, TX (n=131).

Procedures

- Home observations of 3 dinner meals
- Food served to the child was assessed using a digital photography method
- Plate waste was weighed and recorded and used to determine food consumed
- Nutritional analysis of food served and consumed was conducted using Nutrient Data System for Research 2009

Measures

Diet Quality Healthy Eating Index-2010

- Scores adherence to dietary guidelines from 0-100
- The HEI-2010 scores for food served and consumed at each meal were each averaged to create an overall dietary score served and an overall dietary score consumed

Parent Feeding Style Caregiver's Feeding Style Questionnaire

- Caregivers report on how often they use 19 different feeding directives using a 5-point scale (1 = never; 5 = always)
- Feeding style is classified based on the dimensions of demandingness and responsiveness.
 - ↑ demandingness & ↑ responsiveness = **Authoritative**
 - ↑ demandingness & ↓ responsiveness = **Authoritarian**
 - ↓ demandingness & ↑ responsiveness = **Indulgent**
 - ↓ demandingness & ↓ responsiveness = **Uninvolved**

Analyses

T-tests compared the diet quality of food served and consumed by child, caregiver, and meal characteristics. Linear regression models predicted the child's HEI consumed score from parenting feeding style.

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Results

Table 1. Characteristics of the study population

Characteristics	% or Mean ± SD
Child Characteristics	
Age, y, mean ± SD	4.46 ± 0.64
Gender, n (%)	
Female	66 (50%)
Male	65 (50%)
Ethnicity, n (%)	
Hispanic	81 (62%)
African American	50 (38%)
zBMI, mean ± SD	0.83 ± 1.13
Weight Category, n (%)	
Underweight	3 (2%)
Normal Weight	74 (56%)
Overweight	27 (21%)
Obese	27 (21%)
Caregiver Characteristics	
Education, n (%)	
Some college or more	57 (44%)
High school diploma/GED	34 (26%)
Some high school or less	40 (31%)
Employment Status, n (%)	
Both caregiver & spouse employed	33 (25%)
Either caregiver or spouse employed	72 (55%)
Neither caregiver or spouse employed	26 (20%)
Marital Status, n (%)	
Married/cohabitating	64 (49%)
Single	67 (51%)
Meal Characteristics	
HEI Dinner Score, mean ± SD	
Served	44.24 ± 8.40
Consumed	43.37 ± 7.04
# people at the meal, mean ± SD	2.12 ± 1.13
Person Serving Child, n (%)	
Caregiver serves child	116 (89%)
Child serves themselves	15 (11%)
Meal Representativeness, n (%)	
Usual dinner	92 (70%)
Not a usual dinner	39 (30%)

Table 2. Child HEI score of dinner meal served and consumed by characteristics (Mean ± SD)

	HEI Dinner Score Served	HEI Dinner Score Consumed
Overall	44.24 ± 8.40	43.37 ± 7.04
Parental Feeding Style		
Authoritative	47.49 ± 9.93	47.56 ± 6.80
Authoritarian	43.63 ± 8.10	41.52 ± 6.23**
Indulgent	44.70 ± 7.04	43.57 ± 6.44*
Uninvolved	41.17 ± 8.13	41.65 ± 7.75
Child Characteristics		
Gender		
Female	43.01 ± 8.22	42.82 ± 6.50
Male	45.49 ± 8.46	43.93 ± 7.57**
Ethnicity		
Hispanic	45.99 ± 9.20	44.85 ± 7.37
African American	41.40 ± 5.97	40.97 ± 5.77
Weight Category		
Underweight	45.00 ± 5.00	45.89 ± 3.66
Normal weight	44.28 ± 1.02	43.27 ± 0.85
Overweight	43.02 ± 1.63	43.78 ± 1.28
Obese	45.27 ± 1.45	42.94 ± 1.37*
Caregiver Characteristics		
Education		
Some college or more	44.16 ± 8.00	43.58 ± 7.06
High school diploma/GED	43.01 ± 8.77	42.25 ± 6.64
Some high school or less	45.39 ± 8.69	44.03 ± 7.41
Employment Status		
Both employed	46.26 ± 8.31	44.65 ± 6.63
Either employed	43.38 ± 8.81	43.10 ± 7.58
Neither employed	44.04 ± 7.10	42.51 ± 5.93*
Marital Status		
Married/cohabitating	45.02 ± 9.26	44.25 ± 6.75
Single	43.50 ± 7.48	42.53 ± 7.26*
Meal Characteristics		
Person Serving Child		
Caregiver serves child	44.44 ± 0.80	43.59 ± 0.66
Child serves themselves	42.69 ± 1.52	41.69 ± 1.69
Meal Representativeness		
Usual dinner	44.17 ± 0.89	43.37 ± 0.74
Not a usual dinner	44.41 ± 1.32	43.37 ± 1.13

Significantly different from authoritative at ** p < .01, * p < .05

In the unadjusted model, children whose caregiver had an authoritarian, indulgent, or uninvolved feeding style consumed a dinner with significantly lower HEI scores than children whose caregivers had an authoritative feeding style (respectfully, $\beta = -6.04$, $p < 0.001$; $\beta = -3.99$, $p = 0.02$; $\beta = -5.91$, $p = 0.002$). After adjusting for the HEI score of the meal served to the child, the child's ethnicity, child's zBMI, caregiver's level of education, caregiver's employment status, and the number of people in the household, only the authoritarian feeding style remained significant ($\beta = -3.59$, $p = 0.001$).

Conclusions

Caregiver feeding style contributes to the diet quality of children, and among low-income, minority preschoolers, an authoritative feeding style is associated with the highest dietary quality of the four feeding styles. Feeding interventions toward the authoritative feeding style are needed to improve the diet quality of preschool children at dinner.