

Eating Behaviors of Early Childhood at a Selected Upazila in Bangladesh

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Article info	Abstract
<p>Article history:</p> <p>Received: May, 08th, 2025</p> <p>Revised: July 19th, 2025</p> <p>Accepted: August 20th, 2025</p> <hr/> <p>Correspondence author:</p> <p>Name: Mariam Akter Address: Senior Staff Nurse, National Gastroenterology Institute & Hospital, Dhaka-1212, Bangladesh E-mail: mariamakter28234@gmail.com</p> <hr/> <p>International Journal of Nursing and Health Services (IJNHS)</p> <p>Volume 8, Issue 5, October 20th, 2025</p> <p>10.35654/ijnhs.v8i5.868</p> <p>E-ISSN: 2654-6310</p>	<p>Background: Eating behavior plays a vital role in both the prevention and management of chronic illnesses associated with poor nutrition. Children who are overweight tend to display stronger food responsiveness, derive more enjoyment from eating, and often consume more food in response to emotional cues. The aim of this study was to assess eating behaviors among young children in a selected Upazila of Bangladesh. Methods: This cross-sectional study included a total of 103 mothers with children aged between 1 and 5 years. Participants were chosen using a convenience sampling method. Data were collected using a self-administered questionnaire comprising two sections: Part 1 included socio-demographic information, and Part 2 consisted of the Child Eating Behavior Questionnaire (CEBQ). Data analysis was performed using both descriptive and inferential statistics via SPSS version 26. Results: The study found a moderate overall mean score (2.91 ± 0.33) in children's eating behaviors, with variability observed across the eight subscales of the CEBQ. The average age of participating mothers was 27.75 years ($SD = 3.816$). Statistically significant associations were observed between children's eating behaviors and various socio-demographic factors, including mothers' education level ($F = 5.519, p = 0.005$), fathers' education level ($F = 7.328, p = 0.000$), fathers' occupation ($F = 2.687, p = 0.036$), and the number of siblings ($r = 0.334, p = 0.001$). Conclusion: The findings highlight meaningful associations between several demographic variables and children's eating behaviors. These results support the need for policy-level initiatives aimed at promoting food security and balanced nutrition during early childhood, with the goal of reducing malnutrition and supporting healthy development in Bangladesh</p> <p>Keywords: Early childhood, eating behaviors, dietary patterns, malnutrition, Bangladesh</p> <hr/> <p>This is an Open Access article distributed under the terms of the Creative Commons Attribution 4.0 International License CC BY -4.0</p>



Introduction:

Eating behaviors encompass a set of consistent patterns and tendencies toward food consumption that reflect complex internal processes such as hunger, appetite, satiety, and responses to food-related stimuli (1). In early childhood, these behaviors are particularly crucial as they lay the foundation for long-term health and dietary habits. The early years of life are marked by rapid physical, cognitive, and emotional development, and during this formative period, the establishment of healthy eating patterns is essential. These behaviors, however, are not innate; they are shaped by a dynamic interaction of genetic, familial, and environmental influences. While genetic predispositions can significantly influence appetite traits, environmental factors, particularly within the family setting, play a central role in the formation and reinforcement of children's eating behaviors (2).

Parental influence remains one of the most significant determinants of a child's eating behavior. Parents often employ a range of feeding strategies to regulate their children's food intake, aiming to encourage healthy eating. However, some of these practices – such as excessive control, food restriction, pressure to eat, or using food as a reward – may inadvertently contribute to the development of maladaptive eating patterns. These strategies can reduce a child's autonomy and intrinsic motivation to eat, ultimately leading to food refusal, picky eating, or emotional eating (2, 3). In contrast, positive parental modeling, where parents demonstrate healthy eating behaviors and maintain a balanced diet themselves, has been found to have a beneficial impact. This modeling fosters acceptance of a wider variety of foods and promotes healthier choices among children.

Studying eating behaviors in children is essential for addressing the growing burden of nutrition-related chronic diseases, such as obesity, diabetes, and cardiovascular disorders. The foundation of these conditions often traces back to early dietary patterns (4). By understanding and improving children's eating behaviors, public health efforts can effectively target the root causes of poor nutrition and

reduce the incidence of diet-related illnesses in later life.

The role of the family environment is pivotal in shaping health behaviors during childhood and adolescence. While the significance of this environment is well-recognized, the exact mechanisms through which it influences eating behavior remain only partially understood (5). A supportive and health-oriented family environment can promote positive dietary behaviors by modeling appropriate habits, ensuring the availability of nutritious foods, and fostering regular mealtime routines (6). Parental feeding practices, especially those exercised by mothers, are central to children's dietary habits. Mothers are typically the primary decision-makers in determining what, when, and how much their children eat. Their choices are often influenced by the child's perceived preferences, previous food intake, and broader concerns such as nutritional adequacy and food waste (7).

Furthermore, the family's physical environment—including the availability of various foods at home—and mealtime routines significantly shape children's dietary quality. The structure of family meals, frequency of breakfast consumption, and the presence of fast foods are all associated with children's eating habits (8, 9). Family meals not only offer nutritional benefits but also serve as an important opportunity for socialization, cultural transmission, and emotional bonding. Parents often use mealtime as an occasion to model desired eating practices and convey food-related values (10).

In many developing countries, including Bangladesh, the globalization of the food industry has introduced significant dietary changes. The proliferation of fast food, processed snacks, and sugary beverages is influencing traditional eating habits and contributing to a nutrition transition that affects even the youngest members of society (11). This transformation is often accompanied by a reduction in the consumption of fresh fruits, vegetables, and home-cooked meals, further complicating the establishment of healthy eating behaviors among children.

Early childhood—defined broadly as the period from one to five years of age—is a critical stage in the development of lifelong dietary patterns. It is during this period that children are most susceptible to feeding difficulties and disordered eating behaviors (12). These behaviors can range from transient picky eating to more persistent and severe disorders that impair growth and development. An estimated 3% to 10% of children suffer from serious feeding problems that require behavioral intervention and professional support (13). Such problems not only affect physical health but can also influence a child's social and emotional well-being, both in the short and long term. Early eating difficulties can persist into adulthood, making timely detection and intervention critical for promoting healthy lifelong habits (14).

Intervening early in childhood is thus essential to prevent the entrenchment of maladaptive eating behaviors. This requires a nuanced understanding of the causes, risk factors, and manifestations of feeding difficulties. Pediatricians, nutritionists, and public health professionals play a vital role in early identification, but collaboration with families remains a cornerstone of effective intervention (15). Despite the global recognition of the importance of childhood eating behaviors, there remains a significant gap in research related to these issues in the Bangladeshi context. Much of the existing literature comes from high-income countries, where dietary environments, cultural norms, and healthcare systems differ considerably from those in Bangladesh. In rural areas and upazilas—sub-district administrative regions—socioeconomic constraints, limited access to diverse foods, low health literacy, and entrenched cultural beliefs about child feeding may further compound challenges related to childhood nutrition.

Recognizing these contextual differences, the present study sought to explore and assess the patterns and determinants of eating behaviors among young children in selected sub-districts. By examining parental practices, household environments, and sociocultural influences, this study aimed to provide a comprehensive understanding of

how eating behaviors develop and manifest in early childhood within these communities. Assessing eating behaviors during early childhood is not only justified but vital for advancing child health and development in Bangladesh. Early detection of problematic patterns allows for timely intervention, thereby reducing the risk of future health complications. Furthermore, reliable data on children's eating behaviors can guide public health strategies, inform policy decisions, and shape future research agendas aimed at promoting optimal nutrition and preventing eating disorders at the population level.

Method Design

This cross-sectional study was conducted over a six-month period, from April 2024 to September 2024, to assess the eating behaviors of early childhood in Bangladesh.

Sample, sample size, & sampling technique

The study targeted mothers of children aged 1–5 years from two sources: Al-Raji International School in Muladi, Barishal, and the Integrated Management of Childhood Illness (IMCI) corner of the Upazila Health Complex in Muladi, Barishal.

A final sample size of 103 participants was determined using G*Power 3.1.9.4 software, based on a significance level of 0.05, a power of 0.80, and an effect size of 0.30. The initially required sample size was 82, and anticipating a 20% attrition rate, additional participants were included to reach 103. A convenience sampling technique was employed to recruit eligible mothers who met the following inclusion criteria: having a child aged 1 to 5 years, willingness to participate in the study, and availability during the interview session. Mothers were excluded if they had a child with a diagnosed feeding disorder or developmental disability, or if they were unable to understand the questionnaire due to language or literacy barriers.

Data collection process

Data were collected over the six-month study period through direct visits to the study sites. A trained research assistant supported the primary investigator throughout the data

collection process. Mothers were approached individually, and after obtaining consent, were given a self-administered structured questionnaire. The researcher and assistant remained present to clarify any doubts, but participants completed the forms independently. On average, it took 20–30 minutes to complete the questionnaire.

The questionnaire consisted of two parts: a socio-demographic section and the Child Eating Behaviour Questionnaire (CEBQ). The socio-demographic section included 12 items covering maternal age, religion, occupations of both parents, number of siblings, family type, and residential status. The CEBQ, developed by Wardle et al. (2001), is a validated tool used to assess various dimensions of children's eating behaviors as reported by parents (16). It comprises 35 items across eight subscales: Satiety Responsiveness, Slowness in Eating, Food Fussiness, Food Responsiveness, Enjoyment of Food, Desire to Drink, Emotional Under-eating, and Emotional Overeating. A five-point Likert scale was used (1 = never to 5 = always). The translated Bengali version of the CEBQ was used for better comprehension, and the internal consistency across subscales ranged from Cronbach's $\alpha = 0.70$ to 0.85.

Prior to data collection, ethical approval was obtained from the Institutional Review Board (IRB) of Sher-e-Bangla Medical College, Barishal. Written and verbal informed consent were obtained from all participants after the study's objectives, procedures, potential risks, and benefits were clearly explained. Participants were informed of their right to withdraw at any time without consequence, and confidentiality of personal information was strictly maintained.

Analysis

The collected data were analyzed using SPSS version 26. Prior to conducting inferential statistics, assumptions of normality were tested using the Shapiro-Wilk test and visual inspection of histograms and Q-Q plots. Since the data met the assumption of normality, parametric tests were applied. Descriptive statistics (frequency, percentage, mean, and standard deviation) were used to summarize socio-demographic data. Inferential statistics, including independent sample t-tests, one-way

ANOVA, and Pearson's correlation analysis, were conducted to examine the relationship between socio-demographic characteristics and children's eating behaviors. A p-value of less than 0.05 was considered statistically significant.

Results:

This chapter presents the findings related to the key variables of the study. It includes an overview of the participants' socio-demographic characteristics, the distribution patterns of child eating behaviors, and the analysis of the relationship between socio-demographic factors and the eating behaviors of the children.

The socio-demographic profile of the study participants in the Table 1 reveals a diverse background among the mothers of children aged 1 to 5 years. The average age of the participants was approximately 27.75 years (± 3.81), with ages ranging from 19 to 40 years. A majority of the participants (75.7%) identified as Muslim, while 24.3% were from non-Muslim backgrounds. Regarding educational qualifications, half of the mothers (50.5%) had education up to school level, while 28.2% had college-level education and 21.4% had university degrees. In terms of occupation, the majority were housewives (64.1%), followed by service holders (32%) and a small proportion of workers (3.9%). The educational background of fathers showed a more even distribution, with 34% having a bachelor's degree and 26.2% completing higher secondary education. About 18.4% held a master's degree, while a smaller portion had education up to primary (10.7%) and secondary (10.7%) levels. The most common occupation among fathers was private service (45.6%), followed by work as laborers (21.4%), government service (15.5%), day labor (9.7%), and business (7.8%). The average monthly family income was BDT 34,524.27 with a standard deviation of BDT 14,520.33, indicating moderate variability in economic status. Most families (78.6%) were from nuclear households, and the majority (63.1%) resided in rural areas. The children's average age was 3.51 years (± 0.765), with a slight female predominance (55.3% girls compared to 44.7% boys). On average, each family had around 1.83 children (± 0.89).

Table 1: Distribution of participants on the basis of socio-demographic profile (N=103)

Variables	Categories	n	%	Mean±SD
Age (years)	Range (19-40) years			27.75±3.81 6
Religion	Muslim	78	75.7%	
	Non-Muslim	25	24.3%	
Mothers' Education Level	School	52	50.5%	
	College	29	28.2%	
	University	22	21.4%	
Mothers' Occupation	Service holder	33	32%	
	Worker	4	3.9%	
	Housewife	66	64.1%	
Fathers' Education Level	Primary	11	10.7%	
	Secondary	11	10.7%	
	Higher Secondary	27	26.2%	
	Bachelor degree	35	34%	
Fathers' Occupation	Master degree	19	18.4%	
	Govt. Service	16	15.5%	
	Private service	47	45.6%	
	Worker	22	21.4%	
	Day labor	10	9.7%	
	Businessman	8	7.8%	
Family Monthly income (10000-90000) BDT				34524.27±14520.334
Family type	Nuclear	81	78.6%	
	Joint	22	21.4%	
Residential Area	Rural	65	63.1%	
	Urban	38	36.9%	
Age of children (3-5 years)				3.51±.765
Gender	Boy	46	44.7%	
	Girl	57	55.3%	
Number of sibling person (1to 5) person				1.83±.890

The results presented in Table 2 show the mean scores and standard deviations of the eight subscales of the Child Eating Behavior Questionnaire (CEBQ), reflecting different aspects of children's eating behaviors. The overall mean of all subscales was 2.91 (± 0.33), indicating a moderate level of behavioral expression across the sample. Among the subscales, Satiety Responsiveness (SR) recorded the highest mean score (3.16 ± 0.16), suggesting that children were generally responsive to internal cues of fullness. This was followed by Slowness in Eating (SE) (3.05 ± 0.23) and Enjoyment of Food (EF) ($3.02 \pm$

0.17), indicating that most children tended to enjoy their meals and ate at a moderate pace. Emotional Overeating (EOE) had the lowest mean score (2.53 ± 0.34), suggesting that emotional triggers were less likely to lead to overeating among the children. Other subscales such as Food Responsiveness (FR) (2.90 ± 0.31), Desire to Drink (DD) (2.78 ± 0.26), Food Fussiness (FF) (3.02 ± 0.20), and Emotional Undereating (EUE) (2.95 ± 0.23) showed moderate variations, reflecting a balanced pattern in food approach and avoidance behaviors.

Table 2: Mean of Child Eating Behavior Questionnaire (CEBQ) subscales'

Serial	Subscale	Mean±SD
1	Food Responsiveness (FR)	2.90 ± 0.31
2	Enjoyment of Food (EF)	3.02 ± 0.17
3	Emotional Overeating (EOE)	2.53 ± 0.34
4	Desire to Drink (DD)	2.78 ± 0.26
5	Satiety Responsiveness (SR)	3.16 ± 0.16
6	Slowness in Eating (SE)	3.05 ± 0.23
7	Food Fussiness (FF)	3.02 ± 0.20
8	Emotional Undereating (EUE)	2.95 ± 0.23
Mean of total mean of subscales		2.91±.330

Table 3 presents the relationship between child eating behaviors and various socio-demographic characteristics of the participants. The analysis reveals statistically significant associations between child eating behaviors and several parental and household factors. Notably, mothers' education level was significantly associated with child eating behaviors ($p = .005$), with children of school-educated mothers showing the highest mean score (102.12 ± 11.615) compared to those whose mothers had college or university-level education. Similarly, fathers' education level showed a highly significant relationship ($p = .000$), with the highest mean score observed among children whose fathers had primary-level education (114.09 ± 11.397). Fathers'

occupation was also significantly associated with child eating behaviors ($p = .036$); children of day laborers and workers had higher mean scores compared to those whose fathers were in government or private service. In contrast, variables such as age of the mother ($p = .171$), religion ($p = .822$), mothers' occupation ($p = .527$), family income ($p = .106$), family type ($p = .104$), residential area ($p = .234$), child's age ($p = .069$), and gender ($p = .149$) did not show statistically significant associations. However, a strong positive correlation was observed between the number of siblings and child eating behaviors ($r = .334$, $p = .001$), indicating that children with more siblings may exhibit more pronounced eating behavior traits.

Table 3: Relationship between child eating Behaviors and socio- demographic characteristics among the participants

Variables	Categories	Mean±SD	t/f/r	p
Age (years)	Range (19-40)		.090	.171
Religion	Muslim	99.6±10.548	.225	.822
	Non-Muslim	99±13.548		
Mothers' Education Level	School	102.12±11.615	5.519	.005
	College	93.82±8.192		
	University	100.4±11.413		
Mothers' Occupation	Service holder	100.27±11.029	.646	.527
	Private Service	93.5±4.041		
	Housewife	99.42±11.619		
Fathers' Education Level	Primary	114.09±11.397	7.328	.000
	Secondary	94.3±8.327		
	Higher Secondary	99.3±9.797		
	Bachelor degree	96.35±10.424		
	Master degree	99.47±9.594		

Fathers' Occupation	Govt. Service	94.69±7.463	2.687	.036
	Private service	98.63±10.434		
	Worker	103.29±11.529		
	Day labor	106.10±13.691		
	Businessman	95.47±11.23		
Family Monthly income (10000-90000)BDT			-.162	.106
Family type	Nuclear	100.09±12.225	1.647	.104
	Joint	97.1±5.467		
Residential Area	Rural	101.18±8.567	-1.197	.234
	Urban	98.43±12.518		
Age of children(3-5years)			.182	.069
Gender	Boy	101.27±10.782	1.453	.149
	Girl	98.02±11.468		
Number of sibling person (1to 5) person			.334**	.001

Discussion:

The current study tried to understand the early childhood eating behavior through a structured questionnaire comprising of socio-demographic profile related information and the Child Eating Behavior Questionnaire (CEBQ). In addition, it looked for whether socio-demographic characteristics of the participants influenced children eating behavior statistically.

The results of this study revealed a moderate overall mean score (2.91 ± 0.33) of child eating behavior with variation across its eight subscales. Also, the findings of this study observed important associations between various socio-demographic factors and children's eating behaviors. Specifically, the results showed a statistically significant relationship between mothers' education level and children's eating behaviors ($F = 5.519, p = 0.005$). This is in line with a previous study that emphasize the positive role of maternal education in fostering healthier eating habits in children (17). Educated mothers are more likely to engage in positive feeding practices, such as encouraging balanced meals and establishing consistent mealtime routines, which promote better eating behaviors in children (17). The ability of educated mothers to understand dietary guidelines, make informed decisions about food purchases, and create a home environment conducive to healthy eating is well-documented in the literature. However, the findings of this study differ from those of Gökalp et al. (2021), who found no significant difference in eating behaviors based on mothers' education levels (15). This discrepancy

may be due to cultural, socio-economic, or environmental factors that influence parenting practices differently across regions. Nonetheless, the current study underscores the importance of maternal education in shaping children's dietary habits.

A similar positive association was found between fathers' education level and children's eating behaviors ($F = 7.328, p = 0.000$), which is consistent with research by Vollmer and Mobley (2013), who reported that higher parental education levels are associated with healthier dietary practices among children (18). Educated fathers are more likely to model healthy eating behaviors and emphasize the importance of consuming fruits and vegetables while limiting unhealthy food choices, such as sugary snacks and beverages. Studies have shown that children of well-educated parents tend to consume healthier diets, which may be attributed to parents' better understanding of nutrition and their ability to create a structured eating environment (19). The findings of this study contribute to the growing body of evidence that suggests fathers' educational attainment plays a key role in influencing children's eating behaviors.

In addition to education, fathers' occupation was found to significantly influence children's eating behaviors ($F = 2.687, p = 0.036$). This finding supports research by Golan and Crow (2004), who highlighted that parents with demanding or stressful jobs may struggle to provide consistent, nutritious meals for their children (20). Long working hours or irregular schedules can lead to reliance on fast food and convenience meals, which are often unhealthy

(21). The time constraints and stress associated with certain jobs can lead to maladaptive feeding practices, such as rewarding children with food or offering them more freedom in food choices, which may contribute to the development of unhealthy eating habits (22). Conversely, fathers with more stable and predictable work schedules are likely to have more time to spend on meal preparation and food-related decisions, which can positively impact children's eating habits.

Furthermore, the study found a significant relationship between the number of children in a household and children's eating behaviors ($r = 0.334^{**}$, $p = 0.001$). This finding contrasts with the results of Gökalp et al. (2021), who found no significant correlation between family size and eating behaviors (15). Research has suggested that parents with larger families may face challenges in providing individualized attention to each child, potentially leading to more indulgent eating habits and less supervision of children's food choices (23). Additionally, siblings often influence each other's eating habits, and children in larger families may model or share food preferences, which can shape overall eating patterns (24). The current study supports the notion that family size plays a role in shaping eating behaviors, with larger families potentially leading to more shared or less supervised eating habits.

Implications for Clinical Practice, Policy, and Future Research

The findings of this study have several important implications for clinical practice, public health policy, and future research. The significant associations found between parental education and occupation and the eating behaviors of young children underscore the need for targeted nutritional counseling and parental education programs in early childhood settings. Clinicians, particularly pediatricians, pediatric nurses and community health workers, should consider integrating brief educational interventions during routine health visits—especially within programs such as IMCI—to support parents in fostering healthier dietary practices in their children.

From a policy perspective, these results highlight the critical role of parental socioeconomic factors—particularly education and occupation—in shaping children's dietary habits. Policymakers should consider designing family-based nutrition education interventions, with a specific focus on low-education and high-stress occupational groups. Public health campaigns could also prioritize male parental involvement in child nutrition, as paternal education and occupation were found to significantly influence child eating behavior. These findings may also inform school-based and community nutrition programs, especially in semi-urban and rural settings like Muladi, Barishal, where such support is often limited.

Furthermore, the statistically significant relationship between the number of children and eating behaviors suggests that larger families may require tailored interventions to ensure all children receive adequate nutritional support and guidance. Parenting programs may need to address time management, food budgeting, and strategies for individualized feeding in larger households.

Limitations:

Despite providing valuable insights, this study has several limitations that should be acknowledged. First, the use of a cross-sectional design limits the ability to establish causal relationships between parental factors and children's eating behaviors. Second, the study employed a convenience sampling technique, which may introduce selection bias and limit the generalizability of the findings to the broader population. The relatively small sample size ($n=103$), drawn from a single upazila (Muladi, Barishal), further restricts the external validity of the results. Additionally, the study relied on self-reported data from mothers, which may be subject to recall bias or social desirability bias, particularly in the assessment of eating behaviors using the CEBQ. Although the questionnaire was translated into Bengali, potential issues with interpretation or literacy levels may have affected the accuracy of responses. Finally, the study did not explore other influential factors such as household income, cultural practices, or availability of

food, which could have provided a more comprehensive understanding of the determinants of child eating behavior.

Conclusion:

The current study employed the Child Eating Behavior Questionnaire (CEBQ) to evaluate children's eating behaviors, uncovering a moderate average score with noticeable differences across its eight subscales. In addition, the findings of this study contribute to the growing body of literature on the influence of socio-demographic factors on children's eating behaviors. Maternal and paternal education levels, fathers' occupation, and family size were all found to significantly impact children's eating habits, highlighting the importance of family dynamics in shaping dietary behaviors. These results underscore the need for targeted interventions that consider the socio-demographic characteristics of families to promote healthier eating habits among children.

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References:

- (1) Wood AC, Momin S, Senn M, Hughes SO. Pediatric eating behaviors as the intersection of biology and parenting: lessons from the birds and the bees. *Curr Nutr Rep.* 2018;7(1):1-9. <https://doi.org/10.1007/s13668-018-0223-4>
- (2) Scaglioni S, Arrizza C, Vecchi F, Tedeschi S. Determinants of children's eating behavior. *Am J Clin Nutr.* 2011;94(6 Suppl):2006S-2011S. <https://doi.org/10.3945/ajcn.110.001685>
- (3) Rollins BY, Loken E, Savage JS, Birch LL. Maternal controlling feeding practices and girls' inhibitory control interact to

predict changes in BMI and eating in the absence of hunger from 5 to 7 y. *Am J Clin Nutr.* 2014;99(2):249-257. <https://doi.org/10.3945/ajcn.113.063545>

- (4) Rossi A, Moreira EA, Rauen MS. Determinants of eating behavior: a review focusing on the family. *Rev Nutr.* 2008;21(6):739-748. <https://www.scielo.br/j/rn/a/pWWHhNC8CCD7yT4pbxPvK3L/?format=pdf&lang=pt>
- (5) Niermann CYN, Kremers SPJ, Renner B, Woll A. Family health climate and adolescents' physical activity and healthy eating: a cross-sectional study with mother-father-adolescent triads. *PLoS One.* 2015;10(11):e0143599. <https://doi.org/10.1371/journal.pone.0143599>
- (6) Vandeweghe L, Moens E, Braet C, Van Lippevelde W, Vervoort L, Verbeke S. Perceived effective and feasible strategies to promote healthy eating in young children: focus groups with parents, family child care providers and daycare assistants. *BMC Public Health.* 2016;16:1045. <https://doi.org/10.1186/s12889-016-3710-9>
- (7) Bouhlal S, McBride CM, Ward DS, Persky S. Drivers of overweight mothers' food choice behaviors depend on child gender. *Appetite.* 2015;84:154-160. <https://doi.org/10.1016/j.appet.2014.09.024>
- (8) Fink SK, Racine EF, Mueffelmann RE, Dean MN, Herman-Smith R. Family meals and diet quality among children and adolescents in North Carolina. *J Nutr Educ Behav.* 2014;46(5):418-422. <https://doi.org/10.1016/j.jneb.2014.05.004>
- (9) Suglia SF, Shelton RC, Hsiao A, Wang YC, Rundle A, Link BG. Why the neighborhood social environment is critical in obesity prevention. *J Urban Health.* 2016;93(1):206-212. <https://doi.org/10.1007/s11524-015-0017-6>

- (10) Fulkerson JA, Loth K, Bruening M, Berge J, Eisenberg ME, Neumark-Sztainer D. Time 2 tlk 2nite: youths' use of electronic media during family meals and associations with demographic characteristics, family characteristics and foods served. *J Acad Nutr Diet*. 2014;114(7):1053–1058. <https://doi:10.1016/j.jand.2013.10.015>.
- (11) Adair LS, Popkin BM. Are child eating patterns being transformed globally? *Obes Res*. 2005;13(7):1281–1299. <https://doi:10.1038/oby.2005.153>.
- (12) Benjasuwantep B, Chaithirayanon S, Eiamudomkan M. Feeding problems in healthy young children: prevalence, related factors and feeding practices. *Pediatr Rep*. 2013;5(2):e10. <https://doi:10.4081/pr.2013.e10>.
- (13) Baird J, Fisher D, Lucas P, Kleijnen J, Roberts H, Law C. Being big or growing fast: systematic review of size and growth in infancy and later obesity. *BMJ*. 2005;331(7522):929. <https://doi:10.1136/bmj.38586.411273.E0>.
- (14) Passos DR, Gigante DP, Maciel FV, Matijasevich A. Comportamento alimentar infantil: comparação entre crianças sem e com excesso de peso em uma escola do município de Pelotas, RS. *Rev Paul Pediatr*. 2015;33(1):42–49. <https://doi:10.1016/j.rpped.2014.11.007>.
- (15) Gökalp C, Yıldız S, Halicioğlu Baltalı O. Eating behaviors in early childhood (1-5 years) and their association with sociodemographic characteristics in Turkey. *Cureus*. 2021;13(7):e16876. <https://doi:10.7759/cureus.16876>.
- (16) Wardle J, Guthrie CA, Sanderson S, Rapoport L. Development of the Children's Eating Behaviour Questionnaire. *J Child Psychol Psychiatry*. 2001;42(7):963–970. <https://doi:10.1111/1469-7610.00792>.
- (17) Bauer KW, Neumark-Sztainer D, Fulkerson JA, Hannan PJ, Story M. Familial correlates of adolescent girls' physical activity, television use, dietary intake, weight, and body composition. *Int J Behav Nutr Phys Act*. 2011;8:25. <https://doi:10.1186/1479-5868-8-25>.
- (18) Vollmer RL, Mobley AR. Parenting styles, feeding styles, and their influence on child obesogenic behaviors and body weight. A review. *Appetite*. 2013;71:232–241. <https://doi:10.1016/j.appet.2013.08.015>.
- (19) van der Horst K, Oenema A, Ferreira I, Wendel-Vos W, Giskes K, van Lenthe F, Brug J. A systematic review of environmental correlates of obesity-related dietary behaviors in youth. *Health Educ Res*. 2007;22(2):203–226. <https://doi:10.1093/her/cyl069>.
- (20) Golan M, Crow S. Targeting parents exclusively in the treatment of childhood obesity: long-term results. *Obes Res*. 2004;12(2):357–361. <https://doi:10.1038/oby.2004.45>.
- (21) Bauer KW, Hearst MO, Escoto K, Berge JM, Neumark-Sztainer D. Parental employment and work-family stress: associations with family food environments. *Soc Sci Med*. 2012;75(3):496–504. <https://doi:10.1016/j.socscimed.2012.03.026>.
- (22) McIntosh WA, Sobal J, Anderson JM, Basch CE. Fathers' dietary intake is associated with children's diet quality in low-income families. *J Nutr Educ Behav*. 2010;42(4):250–258. <https://doi:10.1016/j.jneb.2009.05.006>.
- (23) Lindsay AC, Sussner KM, Kim J, Gortmaker SL. The role of parents in preventing childhood obesity. *Future Child*. 2006;16(1):169–186. <https://doi:10.1353/foc.2006.0006>.
- (24) Jansen PW, Roza SJ, Jaddoe VW, Mackenbach JD, Raat H, Hofman A, Tiemeier H. Children's eating behavior, feeding practices of parents and weight problems in early childhood: results from the population-based Generation R Study. *Int J Behav Nutr Phys Act*. 2012;9:130. <https://doi:10.1186/1479-5868-9-130>.

