

# The Problem Faced By the Mothers on the Food Choices of Their Children

Shivangi Mishra<sup>1</sup> and Dr. Indra Mathur<sup>2</sup>

<sup>1</sup>Research Scholar, <sup>2</sup>Professor

Home Science, Bhagwant University, Ajmer, Rajasthan, Indian

## Abstract

One of the factors contributing to adolescent overweight is children's increasing use of high energy snacks. Small children's diets are primarily the responsibility of mothers. This study will then illustrate the snack decisions and related thoughts of mothers with young children in a domestic setting. The chance that snacks considerations and decisions are related to maternal education, labor demand, and kid age groups was also investigated. Mothers shared every morsel they gave their child. This study sought to determine whether providing guardians with sporadically sound dietary advice has an impact on their wholesome knowledge and the family's overall commitment to healthy eating. Children's food preferences and WHO BMI scores were examined during training. However, after instruction meetings, guardians' consumption of bread, especially white bread, decreased while their consumption of vegetables and naturally grown tea increased. The training's effects on male eating behavior were evident. After receiving nutrition training, parents were shown to make wise judgments for their kids even while they lacked sufficient information to make informed decisions about their own diets. It is important to offer nutrition education to families with young children.

**Keywords:** Mothers, Food Choices, Children, Problem Faced, Women's

## 1. Introduction

Choosing what to eat may be one of the most repetitive human behaviors. The complexity of this style of acting is determined by a number of factors working together. When children are young, their parents are mostly responsible for providing the food that they eat. As a result, it becomes a significant liability for parents as children's eating habits continue into adulthood. The regular consumption of energy-dense snacks by kids is a key component of this eating behavior. As a result, eating contributes significantly to childhood obesity. Being overweight in youth is a challenging issue since it increases the risk of developing medical disorders both now and in the future.

Customers' value systems influence their food choices since they associate different traits with food. Taste, cost, comfort, wellness and sustenance, relational connections, and quality are important decision-related values, according to the food decision model developed by Furst, Connors, Bisogni, Sobal, and Falk. Security is another important consideration while making dietary choices. These many food-related ideals might lead to conflicts in esteem because they don't always meet the same needs. Conflicts of esteem occur when one worth is met at the expense of another. Luomala et al. conducted study on esteem conflicts that consumers may be aware of when making food decisions. Conflicts between lodging and care, as well as between wellbeing and guilty pleasure, appeared to be substantial food-related esteem conflicts.

Given that mothers are mostly responsible for food preparation, they have a special role in the selection of food and snacks for their children. When moms have conflicts, doubts, and feelings of guilt while making food selections for their children, self-esteem conflicts may appear. Others discovered that mothers felt more guilty about feeding their children unhealthy meals. In a similar vein, Okada hypothesized that people have a more significant need to support an epicurean decision than they do a better decision. Bahr-Bugge and Alms discovered that when Norwegian women offered pizza, they typically protected and justified this favorable and unpleasant choice.

Since children's eating habits and the prevalence of overweight are carried over into adulthood, youth obesity is a challenging issue since it increases the risk of developing medical disorders in the future. The increased intake of fatty food by children, notably energy-dense snacks, is one of the many factors contributing to youth overweight. Biting is a behavior that occurs frequently and is extremely common among kids. Strangely, young children and their parents frequently pair snacks with bad foods.

In general, parents are responsible for choosing the foods their kids eat, and several studies have shown that parents' dietary choices can affect the choices their kids make. Even if dads' roles in providing bites have been increasingly important in recent years, women's roles are by all accounts particularly important in influencing children's dietary choices. In a study, youngsters found that, aside from in single parent families, their mum played an incredibly more important role in their dietary choices than their dad. portrayed the mother's role in food decision-making as a watchman with the primary responsibility for ensuring the wellbeing of her children. Mothers are the primary grouping for the purpose of examining family attitudes on eating, purchasing food, and readiness. It is challenging to get data regarding young children's nibbling decision behavior since young children (2–7 years old) are unable to recognize meals and bits. Additionally, young children typically don't choose food for themselves but rather receive a bite from their parental figures, who are frequently the moms. As a result, moms seem to be held more accountable than fathers for the consequences of the food decisions they make for their kids.

## 1. Literature Review

Goh, Jacob, and Sultana (2019) sought to identify the factors influencing mothers' dietary preferences for young children in Singapore. By facilitating interactions with moms of young children at the center gathering, the specialists used an arbitrary tactic. The investigation found that a number of factors, including social and customary behaviors, the perceived medical benefits of foods, and the accessibility and moderateness of foods, affected mothers' decisions on what to feed their children.

Focusing on the prevalence of obesity among youngsters, Passage, Patel, Narayan, and Mehta (2017) examined the current state and potential future implications of obesity in India. The scientists identified a few factors that contributed to the increasing rates of obesity in India, keeping in mind dietary changes, busy work environments, urbanization, and economic growth.

Van der Horst et al. (2007) conducted a thorough investigation of the organic variables that affect young people's weight-related dietary behaviors. The analysis identified a few natural factors, such as the influence of parents and peers as well as the availability and openness of unhealthy meals. The researchers suggested that intercessions emphasizing these natural factors could help advance healthy eating and behavior among young people.

A framework with a staggered structure for tending to weight in the next 100 years was proposed by Huang et al. in 2009. The design emphasized the importance of paying attention to aspects that can affect obesity to varying degrees, including those that are personal, social, ecological, and tactical. The authors suggested that in order to successfully treat weight, a comprehensive approach would be required.

Finally, Nicklaus and Remy (2013) looked at the early origins of bingeing and how early eating habits can influence later eating patterns. The authors hypothesized that early exposure to a variety of healthy foods can help advance wise dieting behavior in the future. They also emphasized the necessity of early intervention to promote excellent dieting propensities as well as the value of parental modeling of appropriate dieting behaviors.

## 2. Materials and Methods

This assessment was focused on a distinctive preschool educational facility in the Ankara region. Parents who agreed to participate in the review and had children between the ages of 1 and 6 living with them were noted.

Guardians who agreed to participate in the review received a total of 180 minutes of instruction on healthy eating in 3 meetings, each lasting close to an hour. The show's content covered topics like healthy eating, decent kid food, and frequently asked questions about nutrition. An intelligent displaying approach was adopted, and visual materials were used to support the meetings.

### **2.1. Content of the questionnaires and their implementation**

Three questionnaires, titled "Parental Information Structure," "Information Structure for Children," and "Poll on Nourishing Propensities for Children," were administered to guardians prior to the principal training session. The surveys were designed to collect information on the guardians' own characteristics, their level of wellbeing, and the wellbeing of their children. The close-up and personal meeting method was used to manage the polling.

### **2.2. Implementation of the nutrition knowledge test**

The nutrition information exam, which includes important dietary information, was given to the parents at each teaching session.

Every training session had a different topic and material, but the pre- and post-nourishment information examinations used similar questions. Therefore, the application chose both the contrast between when the training and the contrast between the two training meetings, taking into account both what parents remembered from the previous training meeting and the distinction in the degree of information when the schooling was delivered that day.

### **2.3. Collecting food consumption records of the parents and their children**

After every schooling meeting, the guardians were asked to complete food usage records, which were organized separately for guardians and children, in order to determine the dietary character and admission of the guardians and their children. The parents received instruction on how to complete the food usage records at the initial training session. The information provided to the guardians included specific information for bits and records of food consumption. The guardians taking part in the review were also shown test segment sizes from "Food and Supplement Photograph Inventory" while learning about segments from the parents. In light of this, it was expected that parents would be more careful while recording food consumption. Guardians were asked to record food usage data for three consecutive days, including one end-of-week day, on the information structures. Teachers were asked to keep track of the students' food intake on days when parents agreed to keep food intake records at home in order to evaluate the students' eating and behavioral patterns at school.

### **2.4. Body mass index calculation of the parents and their children**

The guardians' and their children's height and weight were estimated, and BMI values were calculated. The World Wellbeing Association's (WHO) BMI order evaluated the guardians' calculated BMI.

Because BMI varies with age in children, it should be used with caution. The children's "WHO Weight List Z-scores for age" were calculated. The "WHO Anthro" programme was used to measure BMI in children aged 0 to 5 years, while "WHO Anthro In addition to" was used to measure BMI in children aged 5 years and older. Similarly, z scores are classified as underweight if they are -1 or below, average if they are +1 or higher, slightly overweight if they are +2 or higher, and obese if they are +2 or higher.

### **2.5. Statistical evaluation of the data**

Most crucially, given the ambiguous and quantitative character of the data acquired for the study, enlightening measurements were introduced. Quantitative aspects were represented as mean characteristics, standard deviation values, upper and lower values, whereas subjective factors were expressed as numbers (N) and rates (%). The quantitative data was examined to see if it had an average circulation using the Kolmogorov-Smirnov test. As middle worth and between quartile ranges (third quartile worth, first quartile

worth), the illuminating measurements of the information that was not shared generally were added. The Friedman Test was used to consider the three training meetings, and the Wilcoxon on Marked Rank Test was used to examine two periods (earlier-later) between the three training meetings.

### 3. Results

Table 1 displays the changes in children's total food consumption during parental nutrition education (at home and at school). Following the first, second, and third schooling meetings, 430.0 g, 470.0 g, and 500.0 g were determined to be the median values for children's continuous milk item consumption. Although consumption of products containing limitless milk increased along with the training, the increase was not regarded as particularly significant ( $p = 0.455$ ). However, the review's middle values for using children's eggs were discovered to be 40.0 g after the first meeting, 44.0 g after the second meeting, and 40.0 g after the third meeting. The middle value was considered to be demonstrably important ( $p = 0.006$ ). The amount of cheddar consumed by the students throughout the lesson was seen to increase, with the middle value not completely fixed at 30.0 g after the first meeting, 40.0 g after the second meeting, and 50.0 g after the third meeting ( $p = 0.024$ ). After the individual meetings, the middle values for the children's consumption of red meat were determined to be 70.0 g, 80.0 g, and 80.0 g; nevertheless, the middle value for meat consumption was not noticeably high ( $p = 0.752$ ).

**Table 1: Analyzing the impact of parental nutrition education on children's overall food consumption (at home and at school)**

Food Consumption of the Children	Education			p
	1 <sup>st</sup> Session	2 <sup>nd</sup> Session	3 <sup>rd</sup> Session	
	Median (IQR**)	Median (IQR**)	Median (IQR**)	
Milk and milk products(g)	430.0 (230.0)	470.0 (256.4)	500.0 (260.0)	0.455
Eggs (g)	40.0 (20.0)	44.0 (34.0)	40.0 (24.0)	0.006*
Cheese varieties (g)	30.0 (34.4)	40.0 (32.0)	50.0 (20.0)	0.024*
Red meat (g)	70.0 (200)	80.0 (80.0)	80.0 (76.4)	0.752
Poultry (g)	40.0 (24.5)	44.0 (30.0)	40.0 (26.4)	0.247
Fish (g)	1.1 (42.0)	1.1 (200.0)	40.0 (234.5)	0.042*
Cereals (g) – total	263.0 (27.4)	274.0 (56.0)	270.0 (47.0)	0.053
Fruit (g)	436.0 (66.4)	240.0 (220.0)	244.0 (78.4)	0.0262
Vegetables (g)	200.0 (246.0)	170.0 (240.0)	410.0 (264.0)	0.742
Legumes (g)	40.0 (36.4)	40.0 (42.4)	40.0 (53.4)	0.722
Nuts, oilseeds (g)	40.0 (434.0)	40.0 (26.4)	30.0 (53.4)	0.037*
Cakes, cookies, biscuits (g)	70.0 (224.4)	64.0 (76.0)	70.0 (36.4)	0.307
Vegetable oil (g)	27.0 (24.0)	30.0 (26.0)	20.0 (48.0)	0.004*
Margarine (g)	1.11 (4.4)	1.11 (5.4)	1.11 (3.4)	0.498
Sugar (g)	28.0 (24.4)	26.0 (11.0)	26.0 (27.0)	0.246

The middle qualities for using poultry meat were found to be 40.0 g, 44.0 g, and 40.0 g independently after the first, second, and third meetings ( $p = 0.247$ ). After the first and second meetings, the middle incentive for children's fish consumption was 1.1 g, but after the third meeting, it was found to be 40.0 g ( $p = 0.042$ ). After the first meeting, 274.0 g after the second meeting, and 270.0 g after the third meeting, youngsters consumed cereal to the fullest extent possible on average 263.0 g. The average value of children's total grain consumption over three learning sessions was not deemed to be demonstrably high ( $p = 0.053$ ). After each individual meeting, the children's middle characteristics for natural product consumption were 436.0 g, 240.0 g, and 244.0 g ( $p = 0.0262$ ). The use of natural products by the kids in the middle of the three training sessions was not taken seriously. Following the first meeting, children consumed an average of 200.0 g of vegetables, followed by 170.0 g and 410.0 g ( $p = 0.742$ ) following the second and third meetings. Following the main meeting, the succeeding meeting, and the third meeting, the middle values for children's

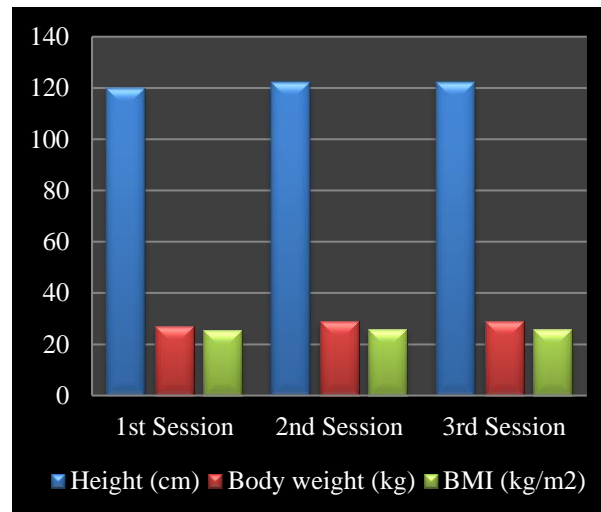
consumption of vegetables were found to be 40.0 g, 40.0 g, and 40.0 g, respectively ( $p = 0.722$ ). However, 40.0 g after the first meeting, 40.0 g after the second meeting, and 30.0 g after the third meeting were shown to be the medium values for children's consumption of nuts and oilseeds ( $p = 0.037$ ). Following the meetings, the middle quality for children's consumption of cakes, snacks, and rolls were 70.0 g, 64.0 g, and 70.0 g, respectively. Cakes, snacks, and roll assortments' middle incentive was not thought to be very important ( $p = 0.307$ ).

The middle values for the children's consumption of vegetable oil were found to be 27.0 g following the main meeting, 30.0 g following the next meeting, and 20.0 g following the third meeting. In three training sessions, the children's midway use of vegetable oil was considered to be really important ( $p = 0.004$ ). After the first, second, and third training meetings, 1.1 g was considered the middle incentive for children's margarine use ( $p = 0.498$ ). After the main meeting, the succeeding meeting, and the third meeting, the middle characteristics for children's sugar were 28.0 g, 26.0 g, and 26.0 g, respectively ( $P = 0.246$ ).

An evaluation of the effects of parental survival training on the children's anthropometric measurements is shown in Table 2. Friedman the children's level, body weights, and weight record numbers for each of the three instruction sessions were tested to determine whether there was a difference.

**Table 2: Analyzing the impact of parental nutrition education on the children's anthropometric measurements**

Anthropometric measurements of the children	1 <sup>st</sup> Session	2 <sup>nd</sup> Session	3 <sup>rd</sup> Session	p
Height (cm)	120.0 (27.0)	122.0 (27.0)	122.0 (26.4)	0.000*
Body weight (kg)	27.0 (6.4)	29.0 (9.0)	29.0 (9.0)	0.204
BMI ( $\text{kg}/\text{m}^2$ )	25.6 (4.0)	25.8 (3.4)	25.7 (3.6)	0.736



**Figure 1: Analyzing the impact of parental nutrition education on the children's anthropometric measurements**

When the effect of the parents' nutrition education on the children's anthropometric measurements was evaluated, the middle qualities for the children's level were found to be 120.0 cm after the initial meeting, 122.0 cm after the second meeting, and 122.0 cm after the third meeting. In the three schooling meetings, the children's level adjustment was deemed to be measurable critical ( $p = 0.000$ ).

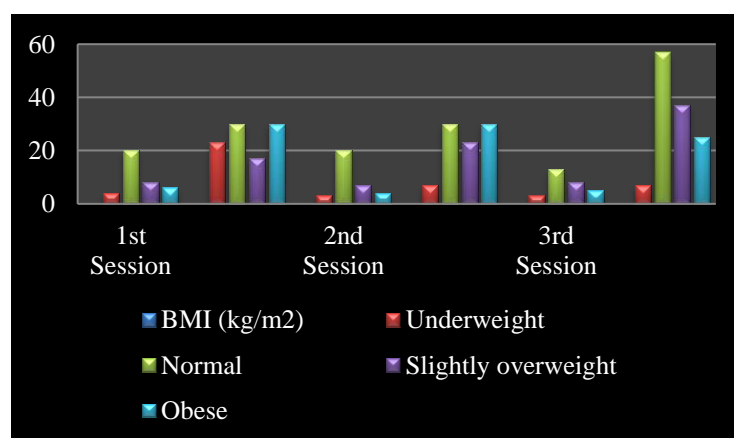
The middle values for children's body weight were determined to be, respectively, 27.0 kg, 27.0 kg, and 27.0 kg after each of the three sessions. After the three meetings, there was not a noticeably large difference in body burdens ( $p = 0.204$ ).

The middle BMIs of youngsters were calculated to be 25.6, 25.7, and 25.7, respectively. It was determined that the difference in weight file values was not quantitatively important ( $p = 0.736$ ).

Table 3 displays the evaluation of the effects of parental nutrition education on the BMI classification of the kids following each of the three teaching sessions. In the first meeting, there were 3 (23.0%) children who were underweight by BMI standards; by the end of the third meeting, this number had dropped to 2 (7.0%). The number of children who were classified as ordinary according to their BMI values increased from 10 (30.0%) to 12 (57%) by the end of the third meeting. In the first meeting, 5 children (30.0%) were identified as being large according to their BMI readings; by the end of the third meeting, this number had dropped to 4 (25.0%).

**Table 3: Analyzing the impact of parental nutrition education on children's BMI classification**

BMI(kg/m <sup>2</sup> )	1 <sup>st</sup> Session		2 <sup>nd</sup> Session		3 <sup>rd</sup> Session	
	N	%	N	%	N	%
Underweight	4	23.0	3	7.0	3	7.0
Normal	20	30.0	20	30.0	13	57.0
Slightly overweight	8	17.0	7	23.0	8	37.0
Obese	6	30.0	4	30.0	5	25.0



**Figure 2: Analyzing the impact of parental nutrition education on children's BMI classification**

#### 4. Discussion

One of the most important factors in choosing healthy eating and dieting is nutrition information. Studies demonstrate that irregularly administered continuous nutrition education has a positive impact on food choice. However, the 0–6 age range, during which children first experience life, is crucial for fostering healthy eating habits. Food selection and dietary habits are initially developed using the guardians as role models.

According to this study, more parents than the Turkish average believed print and visual media to be trustworthy when it came to food. Studies have demonstrated a beneficial relationship between parents' level of nutrition knowledge and their children's healthy dietary habits. Parents should therefore be knowledgeable about healthy and balanced nutrition in order to feed their children the proper meals and encourage healthy eating habits in them.

In the youth era between the ages of 1-6, dietary patterns that will be used throughout life are developed. The general dietary characteristics of preschoolers, who can be divided into the 1-3 age group and the 4-6 age bunch, should be given special consideration by parents and their educators, and kids in these years should be helped to develop healthy eating habits. As parents' knowledge and skills regarding health increase, they will be better able to set up a healthy eating and nutrition environment for their kids, which will promote their growth and development. Furthermore, it's important that parents eat according to tradition. In one study, eating habits and child behavior were linked to the mother's regular home cooking, breakfast planning, unpredictable dietary habits, overeating, rapid food consumption, and eating tendencies.

Developmental observation is essential for identifying issues with overweight, underweight, low weight, hindrance, and short level. Weight by age is thought to be the best marker of development watching, whereas level by age in children is the best indicator of specifically selecting ongoing absence of healthy sustenance. Weight record (BMI), which measures weight and level together, is a crucial factor in determining a child's nutritional state. The children that were remembered for the review were seen as belonging to the average and overweight group when the BMI of the youngsters was calculated.

The concept of "body discernment" involves how socio-social factors influence how people pay attention to changes in their own bodies and the bodies of others. There were discrepancies between guardians' perceptions and the children's actual anthropometric estimates in a review that looked at guardians' perceptions of their children's weight and level. According to a different study, children who were overweight at age 8 had a higher likelihood of growing up to be overweight adults, which increased the risk of developing chronic illnesses as an adult. These differences in focus sizes demonstrate how social and interpersonal traits can influence judgment while also emphasizing the need for parents to pay more attention to their children's growth and development. In light of these various evaluations, it was discovered that parents applied what they learned from the nutrition education to their daily activities, the effects of children's healthy eating were visible in their BMIs, the number of children in underweight and overweight groups decreased, and the number of children with a typical BMI increased after the three education sessions.

Mothers are known to be the primary caregivers in a family, spending the majority of their time with the child and being responsible for their wellbeing, social development, and education. As a result, society is increasingly interested in the education of women. Women should be educated by professionals because the mother's knowledge of nutrition and health affects everyone in the family. In order to affect social change in people, it is also sometimes remembered to consolidate applications and practices in such instructive projects and to rehash the instructive program. Although there were no noticeable changes in the guardians' food consumption in this review, given that the training program had an overall duration of less than a half year and did not include any practices or applications, a more significant relationship is remembered to exist between the food consumption of the children and the guardians over the long term.

## 5. Conclusion

The study was seen as contributing to a positive change in school dinners toward the end of the educational mediations as well as increasing the level of nutrition knowledge of parents, even though it was insufficient to guarantee adequate and adapted nutrition in schools where children spent the majority of their daytime in physical activity. In this review, a rise in the school board's nutrition knowledge level—which develops the school menu—was also observed toward the end of the three educational mediations. The school's management eliminated the bad food days that they had been planning once a week and added extra milk to the morning meal menu.

Giving important nutrition information to various interest groups needs to receive more attention. This includes teaching women how to read food markings and demonstrating sensible and effective food planning techniques. The school environment can be effectively used to influence children's food preferences and support moms in putting their dietary advice into practice at home. This justifies additional investigations to really identify clear goal groups within the larger population.

## References

1. Arrieta MC., et al. "The intestinal microbiome in early life: health and disease". *Frontier in Immunology* 5 (2014): 427.
2. Birch, L. L., & Ventura, A. K. (2009). Preventing childhood obesity: what works? *International Journal of Obesity* (2005), 33 Suppl 1, S74-81.
3. Brown, K. A., & Ogden, J. (2004). Children's eating attitudes and behavior: a study of the modeling and control theories of parental influence. *Health Education Research*, 19(3), 261–271.
4. Couchenour D and Chrisman K. "Families, schools and communities: Together for young children". Cengage Learning (2013).
5. El-Shaarawi, A. H. (2017). Correlates of Mother-Child Feeding Practices in a Sample of Egyptian Mothers. *Journal of Nutrition Education and Behavior*, 49(6), 498–504.e1. [1](#)
6. Epstein JL., et al. "School, family, and community partnerships: Your handbook for action". Corwin Press, (2018).
7. Ford, N. D., Patel, S. A., Narayan, K. M., & Mehta, N. K. (2017). Obesity in a Nation of Youngsters: Current Status and Future Directions in India. *Obesity*, 25(1), 16–21.
8. Garbarino J. "Children and Families in the Social Environment: Modern Applications of Social Work". Routledge (2017).
9. Goh, D. Y., Jacob, A., & Sultana, R. (2019). Factors Influencing Maternal Food Choices for Young Children in Singapore: A Qualitative Study. *Nutrients*, 11(12), 2962.
10. Hanson MA and Gluckman PD. "Early developmental conditioning of later health and disease: physiology or pathophysiology?". *Physiology Review* 94.4 (2014): 1027-1076.
11. Hromi-Fiedler A., et al. "Barriers and facilitators to improve fruit and vegetable intake among WIC-eligible pregnant latinas: an application of the health action process approach framework". *Journal of Nutrition Education and Behavior* 48.7 (2016): 468-477.
12. Huang, T. T., Drewnowski, A., Kumanyika, S. K., & Glass, T. A. (2009). A systems-oriented multilevel framework for addressing obesity in the 21st century. *Preventing Chronic Disease*, 6(3), A82.
13. Langford R., et al. "Obesity prevention and the Health promoting Schools framework: essential components and barriers to success". *International Journal of Behavioral Nutrition and Physical Activity* 12.1 (2015): 15.
14. Larsen JK., et al. "How parental dietary behavior and food parenting practices affect children's dietary behavior. Interacting sources of influence?" *Appetite* 89 (2015): 246-257.
15. Mello CS., et al. "Brazilian infant and preschool children feeding: literature review". *Journal of Pediatric* 92.5 (2016): 451- 463.
16. Nicklaus, S., & Remy, E. (2013). Early Origins of Overeating: Tracking Between Early Food Habits and Later Eating Patterns. *Current Obesity Reports*, 2(2), 179–184.
17. Sobal, J., & Bisogni, C. A. (2009). Constructing food choice decisions. *Annals of Behavioral Medicine*, 38 Suppl 1, S37-46.
18. Tamiru D., et al. "Effect of integrated school-based nutrition education on optimal dietary practices and nutritional status of school adolescents in Southwest of Ethiopia: a quasi-experimental study". *International Journal of Adolescent Medicine and Health* 29.6 (2016)
19. Van der Horst, K., Oenema, A., Ferreira, I., Wendel-Vos, W., Giskes, K., van Lenthe, F., & Brug, J. (2007). A systematic review of environmental correlates of obesity-related dietary behaviors in youth. *Health Education Research*, 22(2), 203–226.
20. Wolfenden, L., Jones, J., Williams, C. M., Finch, M., Wyse, R. J., Kingsland, M., Tzelepis, F., Wiggers, J., & Williams, A. J. (2016). Strategies to improve the implementation of healthy eating, physical activity, and obesity prevention policies, practices or programs within childcare services. *Cochrane Database of Systematic Reviews*, 10, CD011779.