

Factors Influencing Food Preferences: A Review

Rashmi Purohit¹ and Vinita Sharma²

¹Guru Nanak Girls' P.G. College, Udaipur- (Raj.) INDIA

²Govt. Meera Girls' College, Udaipur- (Raj.) INDIA

Abstract:

Food beliefs, practices, preparation, appetite, eating surroundings, and nutrient intake are key elements in the description of population food preferences. Individual food preferences may be based upon personal preferences, habit or tradition, social pressure, availability, convenience, economics and/or nutritional value. Most work on food preferences has focused on these determinants. This paper presents a global review of research done on eating behaviors and food choices and the probable factors underlying it. The objective of the review is to understand the current eating patterns in the developed and developing countries. It reveals that different studies on the food preferences still require establishing relation of some other parameters with food preferences. The review also reveals that a little emphasis has been given to the study on food preference of college girls.

Keywords

Food preferences, peer pressure, body image, socio-cultural, economic, gender

1. Introduction

According to U.S. National Library of Medicine 'The selection of one food over another is food preferences. This is an interdisciplinary topic and investigates how people select the food they eat. Food preference comprises psychological and sociological aspects (including phenomena such as vegetarianism or religious dietary laws) and economic issues. In addition, environmental cues and increased portion sizes play a role in the preference and amount of foods consumed [1]. Food preference refers to the way in which people choose from among available comestibles. In much of the current literature, food preferences are seen as conditioned by the capitalist or nationalist goals of food purveyors [2].

Eating behavior is a function of individual and environmental influences. Individual influences are

psychological as well as biological, whereas, environmental influences include family, friend, and peer networks and other factors such as school meals and fast food outlets [3]. Adolescent girls in particular, because of their excessive concern with body weight or obsession with thinness, are reported with moderate level of disordered eating behaviors [4]. A number of factors like family environment [5], peer pressure [6], media habits [7], concern over body image, socio-cultural and economic context [5], gender [8], and age make significant influence on food preferences. Many studies reported that parents, particularly mothers, have a considerable influence on their children's food preference, because of their presumed central role in acting out the nature and importance of thinness and the gender-stereotyped nature of dieting itself [9]. Very few studies have been done in India considering some different parameters, which influenced food preference.

2. Factors Influencing Food Preferences

Development of food preferences is a complicated process involving several factors and considerations. Fundamental sensory perception is more or less the same for all of us, but both underlying biological and psychological factors as well as the surrounding social and cultural context affects us differently. On the other hand, factors such as culture and the immediate environment may also create similar food preferences for groups of people who live in the same social milieu [10].

In a study Lawrence explore the factors that might affect the food choices of young women. It was found that all the communities took time, price, health and availability into consideration when making food purchases. *Western foods* are used when there is not enough time to prepare a *traditional meal* [11]. Among students of Saudi Arabia, psychological factors like emotions; favorite foods etc. are highly influencing factors rather than physiological or nutritional factors in buying and eating various foods [12]. In a study Mary W. M. et. al. found multiple levels of influence on students' food choices, including taste, food appearance, the

name of the food and/or familiarity with the food, cultural preferences, and perceived food safety [13].

Environment plays a significant role in shaping the food choice of adolescents. According to Adedeji - "Our food choices are shaped by the complex world in which we live. The physical and social surroundings that influence what we eat make it far too hard to choose healthy foods [14]." Eating behavior of university students influenced by individual factors (e.g. taste preferences, self-discipline, time and convenience), their social networks (parental control, friends and peers), physical environment (availability and accessibility, appeal and prices of food products), and macro environment (media and advertising) [15].

In Irish children and adolescents home environment influences diminished during adolescence and competed with influences such as nutritional autonomy and lifestyle factors [16] whereas parents are the most influential factors determining food choices of adolescent girls of 11 to 14 years [17]. On the other hand adolescents in South India prefer to take their own decisions regarding choice of food items [18].

There is converging evidence of a direct causal link between food advertising and behavior pattern of the hostlers about the fast food consumption [19]. Preference of adolescent girls for fast and Junk food is highly influenced by advertisements [20]. Major motivation factors amongst adolescents to choose food are: health, mood, religion, and price/convenience. The convergence of price and convenience items strongly influenced food choice of adolescents [21].

Nutritional knowledge, importance of taste preferences, cost, convenience, social influences, and advertising influence the food choices of Appalachian youth [22]. Sensory items such as taste, texture and smell are less salient for adolescents than adults [21]. Dish color also has an effect on food appeal. In a study Wilbur found that a majority preference for the images of food served on white dishes opposed to the images of the same foods served on colored dishes [23].

3. Preferences of food

At age 12 years, 78% drank milk and had the lowest soda intake (276g), while at age 19-years; only 36% drank milk and drank a high amount of soda (423g) [24]. Adolescent girls (11-14 years) have high preference for snacks [17]. Girls liked fruit and vegetables more than boys did; boys liked fatty and sugary foods, meat, processed meat products and eggs more than girls did. Children's food preferences overall are not consistent with a healthy diet [25]. Milk does not taken by adolescent girls in adequate amount [20].

University students with high income and obese students are more likely to consume low calorie diets [26]. Among university students females are particularly more prone to adopt the low calorie diet than males, while males are more likely to adopt a westernized diet [26]. Young females of college prefer traditional homemade food than fast food i.e., western style of having food in restaurants [27]. Fast foods are often consumed with sweetened beverages [28].

In Saudi Arabia Fruits, vegetables, breads and cereals consumption for rural teens is lower than urban, whereas protein and milk or dairy intakes are higher among rural compare to urban [29], Abuzaid O. I. (2012) and boys make healthier choices than girls on a number of items [30]. Vegetables and fruits, except dates, are not frequently consumed by most college students in Saudi Arabia [31].

4. Dietary Habits and Pattern

In general students take meals regularly. Female students have healthier eating habits compared to male students in terms of daily breakfast intake and meal frequency [32]. There is a significant difference between males and females in terms of their dietary patterns [21]. Majority of Saudi adolescents do not have a daily intake of breakfast [33]. Dinner time deviated from regular supper time in case of adolescent girls. Generally, adolescent girls skipped their meals [20]. Meal skipping is common among males (53.6%) compared to their female (35%) counterparts [28]. Most common eating habits among college students in Saudi Arabia are eating with family, having two meals per day including breakfast, together with frequent snacks and fried food consumption [31]. Dietary habits of the adolescents are related to the increase in overweight [34].

5. Fast Food as Food Preferences

There is a direct causal link between food advertising, parent's role and behavior pattern about the fast food consumption [19]. Almost all of university students used to go to fast food restaurants [35]. Frequency of fast food restaurant use is associated with higher energy and fat intake and greater body weight [36]. Eating out at fast food restaurants is higher among urban than rural [29].

Adolescent girls eat fast food primarily for enjoying the delicious taste, followed by convenience. Such girls have significantly higher mean waist circumference and hip circumference [37]. The majority of university girls consume fast food at an average of 2-3 times a month and the main reason for their fast food consumption is convenience [38]. Preference of adolescent girls for fast and Junk

food is highly influenced by advertisements [20]. University girls' perception regarding the unhealthfulness of fast food does not necessarily affect their frequency of fast food consumption [38].

The most preferred fast food is pizza followed by chicken and hamburger [35]. Fast foods made from wheat flour are the most popular. Fast foods are often consumed with sweetened beverages. Fast foods are a major contributor to the nutrient intake of undergraduates [28]. Commercial food products are an instant hit among the upcoming generation showing the preference sequence of is like very much (40.2%), like moderately (28.75%), like extremely (28%), and neither like nor dislike (4.65%) [39].

6. Food Preferences of Students

Almost all of the students used to go to fast food restaurants [35]. The majority of university girls consume fast food at an average of 2-3 times a month [38]. Among university students females are particularly more prone to adopt the low calorie diet than males, while males are more likely to adopt a westernized and vegetarian diet [26]. Young females of college prefer traditional homemade food than fast food i.e., western style of having food in restaurants [27]. University girls' perception regarding the unhealthfulness of fast food does not necessarily affect their frequency of fast food consumption [38]. University students with high income and obese students are more likely to consume low calorie diets [26].

Eating behavior of university students influenced by individual factors (e.g. taste preferences, self-discipline, time and convenience), their social networks (e.g. (lack of) parental control, friends and peers), physical environment (e.g. availability and accessibility, appeal and prices of food products), and macro environment (e.g. media and advertising) [15]. Alcohol intake and smoking are not common among students [32]. Fast foods are a major contributor to the nutrient intake of undergraduates [28]. There is a direct ambiguity in the knowledge, awareness and prudent consumption behavior amongst the university hostlers [19].

7. Barriers in Healthy Eating

Shepherd studied about barriers in healthy eating of young people. It was found that barriers to healthy eating included poor school meal provision and ease of access to, relative cheapness of and personal taste preferences for fast food [40]. In a different study carried by Stevenson, four key factors were identified as barriers to healthy eating. These factors are- physical and psychological reinforcement of eating behavior, perceptions of food and eating

behavior, perceptions of contradictory food-related social pressures, and perceptions of the concept of healthy eating itself [41]. Social class and time constraints also make eating healthy difficult for many college students [42]. Money does not affect all students equally but disproportionately affects students of lower economic classes [42].

8. Conclusion

Food beliefs, practices, preparation, appetite, eating surroundings, and nutrient intake are key elements in the description of population food preferences. Individual food preferences may be based upon personal preferences, habit or tradition, social pressure, availability, convenience, economics and/or nutritional value. The review also explicitly states that most work on food preferences has focused on these determinants, with less attention given to the media considerations. Different studies on the food preferences still require establishing relation of media with food preferences of college girls. Most of works on food preferences have focused on school children, women and community determinants, with less attention given to the girls and no such work including young college girls has been carried out yet.

9. References

- [1] Brian, Y. and Paul W. The Role of Television Advertising in Children's Food Choice, A review commissioned by University of Dundee under their R & D program in Food Acceptability and Choice, 2014.
- [2] Monica L. S. Archaeology of Food Preference, *American Anthropologist*, 2006. 108(30), 480–493.
- [3] Story, M., Neumark-Sztainer, D., French, S. Individual and environmental influences on adolescent eating behaviors. *Journal of the American Dietetic Association*, 2002. 102(3), S40–S51.
- [4] Madanat, H. N., Lindsay, R., Campbell, T. Young urban women and the nutrition transition in Jordan, *Public Health Nutrition*, 2011. 14(4), 599–604.
- [5] Neumark-Sztainer, D., Eisenberg, M. E., Fulkerson, J. A., Story, M., Larson, N. I. Family meals and disordered eating in adolescents: longitudinal findings from Project EAT, *Archives of Pediatrics and Adolescent Medicine*, 2008. 162(1), 17–22.
- [6] Favor, L. J. *Food as Foe: Nutrition and Eating Disorders*, Courtesy of the National Academic Press, Washington, DC, USA. 2007.
- [7] Cash, T. F., Pruzinsky, T. *Body Image: A Handbook of Theory, Research and Clinical Practice*, The Guildford Press, London, UK, 1st edition. 2004.
- [8] Costa, C., Ramos, E, Severo, M., Barros, H., Lopes, C. Determinants of eating disorders symptomatology in Portuguese adolescents, *Archives of Pediatrics and Adolescent Medicine*, 2008. 162(12), 1126–1132.
- [9] Thompson, S. H., Rafiroiu, A. C., Sargent, R. G. Examining gender, racial, and age differences in

- weight concern among third, fifth, eighth, and eleventh graders, *Eating Behaviors*, 2003. 3(4), 307–323.
- [10] Vabo, M., Hansen, H. The Relationship between Food Preferences and Food Choice: A Theoretical Discussion. *International Journal of Business & Social Science*, 2014. 5(7).
- [11] Lawrence, J. M., Devlin, E., Macaskill, S., Kelly, M., Chinouya, M., Raats, M. M., Barton, K. L., Wrieden, W. L., Shepherd, R. Factors that affect the food choices made by girls and young women, from minority ethnic groups, living in the UK, *Journal of Human Nutrition and Dietetics*, 2007. 20(4), 311–319.
- [12] Suneetha, E., Al Shammery, M. U. H. Nutrition Knowledge and its Impact on Food Choices among the students of Saudi Arabia, *Journal of Dental and Medical Sciences*, 2014. 13(1), 68-74.
- [13] Murimi, M. W., Chrisman, M., McCollum, H. R., Olevia, M. A Qualitative Study on Factors that Influence Students' Food Choices. *Journal of Nutrition and Health*, 2016. 2(1), 1-6.
- [14] Adedeji O. A., John U. I. The concept of food environment and the different environmental influences on food choice. *American International Journal of Research in Humanities, Arts and Social Sciences*, 2015. 9(1), 72-77.
- [15] Deliens, T., Clarys, P., Bourdeaudhuij, I. D., Deforche, B. Determinants of eating behavior in university students: a qualitative study using focus group discussions. *BMC Public Health*, 2014. 14(53), 1- 12.
- [16] Fitzgerald, A., Heary, C., Nixon, E., Kelly, C. Factors influencing the food choices of Irish children and adolescents. *Health Promotion International*, 2010. 25 (3), 289-298.
- [17] Shrivastav, M., Thomas, S. Snack Consumption among Underprivileged Adolescent Girls, *Indian Pediatrics*, 2010. 47, 888-891.
- [18] Thiruselvakumar, D., Sinuvasan, K., Chakravarthy, S. R., Venkatesh, E. Factors affecting food choice and attitude of choosing food items among adolescents in South India. *International Journal of Scientific and Research Publications*, 2014. 4(4), 1-4.
- [19] Kumar, H., Palaha, R., Amandeep, K. Study of consumption, Behavior and Awareness of Fast Food among University Hostlers. *Asian Journal of Clinical Nutrition*, 2013. 5(1), 1-7.
- [20] Sultana, A., Ahluwalia, S. Impact of Modern Approaches on Nutritional Health of College Going Adolescent Girls of Lucknow City. *Global Journal of Finance and Management*, 2014. 6(3), 287-292.
- [21] Michelle, S., Barbara S. Determinants of Food Choice in Irish Adolescents. *Food Quality and Preference*, 2012. 25, 57–62.
- [22] Swanson, M., Nancy E. Schoenberg, R. D., Sherry W. and Kaye D. (2013). Perceptions of Healthful Eating and Influences on the Food Choices of Appalachian Youth. *Journal of Nutrition Education and Behavior*, 2013. 45(2), 147–153.
- [23] Wilbur, L. The Effects of Color on Food Preference. A Senior Honors Thesis Submitted in Partial Fulfillment of the Requirements for the Honors Degree in Bachelor of Science in The Department of Communication, The University of Utah, 2013. <http://cdmbuntu.lib.utah.edu/>
- [24] Bowman, S. A. Beverage choices of young females: changes and impact on nutrient intakes. *Journal of American Dietitian Association*, 2002. 102 (9), 1234-1239.
- [25] Cooke, L. J., and Jane Wardle, J. Age and gender differences in children's food preferences. *British Journal of Nutrition*, 2005. 93, 741–746.
- [26] Salameh, P., Jomaa, L., Issa, C., Farhat, G., Salameh, J., Nina Zeidan, N., Baldi, I. Assessment of dietary intake patterns and their correlates among university students in Lebanon. *Frontiers in Public Health*, 2014. 2(185), 5.
- [27] Steffi, S., Josephine, R. M. A Case Study on Trend of Food Style among College Students. *International Journal of Advances in Pharmacy, Biology and Chemistry (IJAPBC)*, 2013. 2(1). www.ijapbc.com
- [28] Afolabi, W.A.O., Towobola, S.K., Oguntola, C.R.B., Olayiwola I.O. Pattern of Fast foods Consumption and Contribution to Nutrient intake of Nigerian University Students, *International Journal of Education and Research*, 2013. 1 (5), www.ijern.com
- [29] Abuzaid, O. I. Eating Patterns and Physical Activity Characteristics among Urban and Rural Students in Saudi Arabia. A Dissertation Presented to the Univ. of Nebraska in Partial Fulfillment of Requirements For the Degree of Doctor of Philosophy, 2012.
- [30] Samiha A.B.S. Food Choices among Adolescent Girls and Boys in Intermediate and Secondary Schools in Al Qassim, Saudi Arabia. A Thesis submitted in partial fulfillment of the requirements for the Degree of Master of Sciences in Family and Consumer Sciences Education of Texas Tech University, 2016.
- [31] Al-Rethaiaa, A. S., Fahmy, A. E., Al-Shwaiyat, N. M. Obesity and eating habits among college students in Saudi Arabia: a cross sectional study. *Nutrition Journal*, 2010. 9(39), 1-10.
- [32] Yahia, N., Achkar, A., Abdallah, A., Rizk, S. Eating habits and obesity among Lebanese university students, *Nutrition Journal*, 2008. Volume 7(32), 1-6.
- [33] Al-Hazzaa, H.M., Abahussain, N.A., Al-Sobayel, H.I., Qahwaji, D.M., Musaiger, A.O. Physical activity, sedentary behaviors and dietary habits among Saudi adolescents relative to age, gender and region. *International Journal of Behavioral Nutrition and Physical Activity*, 2011. 8(140), 1-14.
- [34] Washi, S. A., Ageib, M. B. Poor diet quality and food habits are related to impaired nutritional status in 13- to 18-year-old adolescents in Jeddah. *Nutrition Research*, 2010. 30(8), 527–534.
- [35] Yardima, H., Yahya, O., Ozcelik, A. O., Surucuoglu, M. S. (2012). Fast Food Consumption Habits of University Students: The Sample of Ankara. *Pakistan Journal of Nutrition*, 2012. 11(3), 265-269.
- [36] French, S. A., Harnack, L., Jeffery, R. W. Fast food restaurant use among women in the Pound of Prevention study: dietary, behavioral and demographic correlates. *International Journal of Obesity Related Metabolism Disorder*, 2000. 24(10), 1353-1359.
- [37] Al-Faris, N. A., Al-Tamimi, J. Z., Al-Jobair, M. O., Al-Shwaiyat, N. M. Trends of fast food consumption among adolescent and young adult Saudi girls living in Riyadh. *Food and Nutrition Research*, 2015. 59.



- [38] Ismail, I. Trend of fast food consumption among university girls in Karachi, Pakistan. *International Journal of Endorsing Health Science Research*, 2016. 4(1), 32-38.
- [39] Farooqui, M., Paul, V., Jain, V. (2013). Food preferences among adolescent girls (11-13 yrs) in Allahabad city. *Food Science Research Journal*, 2013. 4(1), 29-31.
- [40] Shepherd, J., Harden, A., Rees, R., Brunton, G., Garcia, J., Oliver, S., Oakley, A. Young people and healthy eating: a systematic review of research on barriers and facilitators. *Health Education Research: Theory & Practice*, 2006. 21(2), 239–257.
- [41] Stevenson, C., Doherty, G., Barnett, J., Muldoon, O.T., Karen, T. Adolescents' views of food and eating: Identifying barriers to healthy eating. *Journal of Adolescence*, 2007. 30(3), 417–434.
- [42] Reyes, A. M. Influences on College Students' Eating Habits. Thesis Submitted to The Honors College in Partial Fulfillment of the Bachelor's degree with Honors in Sociology, The University of Arizona, 2010.