Survey of Fast Food Consumption Status and its Relationship with Personal-Background Variables among Students of Ilam Universities, Iran

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Background & Aims of the Study: Changing life styles is a modernity achievement in urban communities. A case that bodes on the changing life style is the changing nutritional behavior. The current study set to determine the condition of fast food consumption and its relationship with individual-background variables.
Materials and Methods: This descriptive-analytical study was conducted on 227 college students in the age group of 17-36. Simple stratified sampling was done. Data were collected by researcher-made questionnaire, and then analyzed by SPSS 22 through spearman, Mann-Whitney U, and Kruskal-Wallis H tests.
Results: The results illustrated that the age mean was 21.11, the minimum age was 17, and the maximum age was 36. Women consisted 62.6 % of research samples. Half of the students (51.1 %) had a weight of less than 60 kg. Weight and height means were 62.96 kg and 169.87 cm, respectively. Majority of students perched in the BMI range (18.5-25) as well, i.e. they had a normal weight. The workout time mean was 98.42. Most students selected more than one million Tomans as their families' salary, confirming the achieved results regarding economic condition of families.
Conclusion: Assessing the students' fast food consumption illustrated that they had fast food once a fortnight and once and twice per week. There was a negative relationship between age and fast food consumption, a positive relationship between education levels of students' fathers, a positive relationship between traveling and fast food consumption, and a positive relationship between fast food past behavior and fast food consumption.

Background

Although fast food consuming has been the reason of weight increase; however, there is little knowledge on the relationship between demographic information and manner of life with fast food consumption. Studies illustrate that mostly male youths, people with high income, and town residents currently eat fast food (1). Studies have demonstrated that mostly male youths, persons with high income, and town residents have fast food more than others. Various surveys show that the reasons of propagation and salient increasing of fast food consumption is the changing of traditional structures of families and delicious, low cost, and convenient nature of fast foods (2).

Some other surveys suggest a straight relationship between fast food demands and watching television and lack of motion (3). Paeratakul et al. showed that 37% of youths and 42% of kids eat fast food daily (4). In addition, the study of Faghihand Anosheh illustrated that 20% of teenagers and 10% of adults consume sandwich three times a week and more (5). Indeed fast food consumers are not culprit; it is difficult to resist eating fast food on any street

sideline. In fact, plenty of youths believe that they cannot omit their daily fast food consumption.

Hence, it is sensible to survey the norms and levels of control ability of youths on performing preventable behaviors such as fast food abstinence, decreasing meal contribution, increasing fruit and vegetable consumption, avoiding fatty and fried foods, and doing athletic activities. Moreover, parents are influential factors to control and set constraints on eating foods. Educating parents on healthy nutrition could be effective for alimental patterns of youths.

A research study indicated that if knowledge of parents on alimental patterns were more, receiving healthy nutrients like fruits and vegetables by students would have been more (6). Thus, parents are the basic components of behavior modification program. Furthermore, utilization of healthy alimental patterns in obtaining educational policies appropriately promotes alimental knowledge and it seems very important to encourage people follow healthier alimental patterns instead of following unhealthy patterns for controlling weight and preventing all types of fatness.

An achievement of modernity is lifestyle changes which societies have engaged in, especially urban societies. One case that bodes on the changing lifestyle is nutritional behavior changes. An obvious example is ample expansion of fast food consumption among families and community members. Fast foods were generated by the west industrial and modern community, which have influenced other societies such as Iran.

Most experts believe that fast foods are symbols of modernity and mechanized life in the world today, favored by the youth, and they have replaced several daily meal plans with these foods. Fast food means preparing food in the least time possible. In other words, in industrial communities, people do not have time for preparing traditional foods due to their occupations and because they have to prepare

meal for other members of family to save cooking time.

It seems that having a job by each member of a family can be a reason of prevalent consumption of fast food, i.e. an obstacle to cook at home especially by housewives. Because of limitations to cook at offices and schools, staff workers, labors, and students have to eat fast foods. In this study, consuming fast food has been called a phenomenon for which it has expanded, and its consumption is rising, hence, the society will confront serious dangers (7). Today, criteria and motivation for food selection is the taste, so in order to produce delicious fast foods, salt and other materials are added to make them delicious, thus preferable for people to consume (5).

Due to troubles of industrial and immobility life, fast food consumption could be the cause of diseases such as cardiovascular, diabetes, osteoporosis, etc. (8, 9).

Aims of the study:

The current study is therefore designed to survey the status of fast food consumption among college students of Ilam universities, Iran.

Materials & Methods

A descriptive-inferential study was done on BA-BS students of 17-36 years old in 2014. The sample size was estimated 227. Stratified sampling was performed. After receiving required authorizations from research council of universities and receiving satisfactions from university authorities, questionnaires were distributed among students of the following universities: Ilam University, Medical University, Azad University, Non-profit Universities, and PNU University.

Every stratification sample had equal size compared with proportion of its population. Finally, the sample size for each stratified sample was 34, 18, 99 and 76, respectively. Uninterested subjects were excluded and

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replaced with others. Weight and height of students were measured by weighting and stadiometer devices.

BMI was calculated in terms of kg/m^2 according to WHO standards criteria. The questionnaire was researcher-made, anonymous, and closed answer, designed based on previous studies, books, and dissertations. Validity of the questionnaire was confirmed by field experts, and the reliability was assessed by alpha Cronbach test (0.7). The questionnaire was separated into two parts; the first part included questions on personal and basic information, and the second part included questions to assess fast food consumption.

Data analysis:

The collected data were analyzed by SPSS 22, and mean, correlation, Mann-Whitney U, and Kruskal-Wallis H analyses were performed.

Results

The age mean of participants was 21.11. The lowest age and highest age values were 17 and 36.

Females included 62.6% of the respondents. Most respondents majored in computer engineering and Information Technology (IT). Half of students (51.1%) weighted less than 60 kg, and their weight mean was 62.96. Height mean of students was 169.87 cm. Most respondents were in 18.5-25 category of BMI, i.e. they were normal. More than half of the students watched television less than an hour (58.1%). Nearly half of the students played sport; 13.2 % played football and 9.7% did bodybuilding. Most students played sport three times a week for 1-2 hour(s). 98.42 minutes was the mean of workout duration time. Students' fathers had educational qualifications as follows; diploma (26%), BS/BA (23.2%), middle school (11.5%), illiterate (8.8%), and MS/MA and PhD (4.8 %).

Students' mothers had educational qualification as follows: elementary (23.9%) and diploma (20.3%). 40.5% of students' fathers had self-employed jobs and 27.3% were official employees. 85.5% of mothers were house keepers. 53.3% of students were from middle economic situation class. Most students reported that their families had a salary more than one million to man, confirming the cause of families' economic status. 90.7% lived in their own homes. 80% of students' families had cars; 60% had only one car. 28.2% did not have any private PC, and 24.2% had not gone on journeys. 31.7% of students travelled two times a year, and 26% travelled once a year. Based on Table 1, most students (25.6%) consumed fast food every two weeks and twice a week (20.3%).

Table 1) Frequency distribution of fast food consumption by students

Fast food consumption	F	Percent
Never	18	7.9
Once every few months	44	19.4
Once a month	36	15.9
Once every two weeks	58	25.6
Once-twice a week	46	20.3
3-5 times a week	17	7.5
Once a day	7	3.1
More than once a week	1	0.4
Total	227	100

SD: 1.55

According to Table 3, there is a significant relationship between past behavior and fast food consumption (0.99).

Table 3 illustrates that there is a significant and positive relationship between past behavior and fast food consumption.

Table 2) Association between background-personal variables with fast food consumption

Background-Personal Variables	F	ρ	Sig
Age	227	-0.13	*0.05
Family members	227	0.017	0.8
Weight	227	-0.086	0.199
Height	227	-0.044	0.5
BMI	227	-0.058	0.385
Watching television	227	0.016	0.81
Number of doing exercise weekly	114	-0.057	0.54
Time of doing exercise	114	-0.119	0.2
Fathers' education	227	0.172	**0.001
Mothers' education	227	0.041	0.54
Family economic condition	227	-0.065	0.32
Monthly family income	227	0.226	**0/001
Approximate house cost	206	0.091	0.19
Number of family cars	227	-0.032	0.629
Number of annual travels	227	0.13	*0.05

*Level of significance: 0.95
**Level of significance:0.99

Table 3) Association between past behaviors with fast food consumption

Past behavior	F	r	Sig
Number of consummated fast foods in the last week	227	0.608	**0.000
**Level of significance: 0.99			

Discussion

In recent years, fast food consumption has significantlypervaded among the youth; about 30% of children and youths in the United States consume fast food everyday (10, 11). In this study, fast food consumption condition among college students had survived and after it analyzed by SPSS 22. The results illustrated that there is a significant relationship between age and traveling times (0.05), and there was a significant relationship between the fathers' education level and family income (0.01). U-Mann Whitney test and Kruskal-Wallis test showed that there is not a significant relationship between the mean of the following variables,gender, schooling field, doing workout, kind of sport, occupation of father and mother, economic status, housing condition, and having personal computer with the mean of fast food consumption. There were significant differences between the level of income and housing cost with fast food consumption, Morse suggested that men consume fast food more than women (12). There was a significant and inverse relationship between age and fast food consumption means with age increase. Rydel reported a significant relationship between age and education level with fast food consumption. In study of Bowman, people with high income consumed fast food more than others (13).

In this study, there were not significant relationships and differences between fast food consumption and family members, weight, height, BMI, watching television, workout time, mothers' education, economic situation, approximate price of house, and number of families' cars. However, findings of Satai demonstrated a positive relationship between weight and fast food consumption (14). In the studies of Duffey and Morse, there was a direct and positive relationship between rising BMI and fast food consumption (15, 12). Caroli reported a positive relationship between watching too much television and fast food consumption (3). Van and Zyl determined that 11% of individuals consume fast food daily, 27.6% 2-3 times a week, 20.8% once a week, and only 3.8% consumed fast food once a month (16). The study of French illustrated that 21% of women consumed fast food three times a week (2). Faqih and Anoshe showed that 20% of adults consumed fast food one/two times a week (5). The present study recommends families and youths to promote their knowledge to select and buy healthy and appropriate food based on their age, size of body, type of food, and details of each food such as calories.

Conclusion

The present study showed that people who do not have the enough time for cooking at home often go to the closest restaurants or order food at their work/study place. However, these people are recommended to select healthy restaurants and order homemade and vegetable services.

Footnotes

The authors thank the students for active participation in this research.

Conflict of Interest:
The authors declared no conflict of interest.

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