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A Study of Fast Foods Consumption Attitude among Secondary High School Students, Ardakan, Yazd, Iran

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ABSTRACT

Introduction: Healthy and nutritional habits are formed and consolidated during adolescence. So this research has been done in Ardakan-Yazd province on high school students' attitude to fast food use.

Methods: In this cross-sectional descriptive study, 200 students have been chosen by stratified sampling method and the data was collected by a questionnaire which approved its reliability and validity. All the descriptive data has been analyzed by SPSS 16 software through Chi-square experiment and ANOVA tests.

Results: The results of the experiment determined that 55% of the students were female, and 93% were single. The students' BMI was as follow: 22% thin (BMI< 18.5) 56% normal (18.5≤ BMI< 25) 14.5% overweight (25≤ BMI< 30) 6.5% fat (obese) (BMI ≥30).The female has a positive attitude to fast foods (P= 0.03). The mean attitude score for eating fast food in 17-18 years old group was more than 15-16 years old students (P= 0.001). The mean attitude score also showed that the single students were more eager to eat fast foods than the married students (P= 0.001)

Conclusion: Most of the people who use fast foods are low educated, teenagers, youth and singles. On the other hand, social media like TV and radio and family has a significant effect on correct nutritional habits. So improving family's attitudes and educating students and teachers by social media can help in transferring data to the students and their teachers.

Keywords: Attitude, High School Students, Fast Foods, Yazd

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Introduction

Eating healthy food is not just a kind of diet while it means some changes that we make in our life. In recent years, by changing in society food pattern beside vast advertisements causes big changes in youth and teenagers food taste. Most of the health and food habits are shaped and fixed in this period. So improving and shaping bad and harmful habits can face teenagers and youth with a serious danger., Among all other age groups, teenagers and youth have the worst and the most, not acceptable nutrition situations and food habits (1, 2). If the unhealthy lifestyle is shaped and fixed in teen time, it will last for all lifetime.

On the other hand, adolescence time is very suitable for presenting and introducing useful and healthy food data by society, social media, friends, and family. As adolescence and youth is the best time for growing and improving food needs (1). So eating a large amount of fast food can cause different obese disease or overweighting while the experiment showed that it can also influence the educating process and practiced improvement of children. It also showed that eating a lot of fast food can have bad effects on students ability in some lessons like math, reading and general science in next years (3).

Fast foods are a fast and easy making foods such as all kinds of sandwiches, hamburgers, cheeseburgers, fried chicken and shrimp, hot dogs, French fries, nuggets, pizza, etc .The above-mentioned foods are harmful because of having a high amount of calories and trans fatty acid (4, 5).

Fast foods generally contain some proteins and carbohydrate and different vitamins, but they have a very low amount of vitamins A and C and fiber but a large amount of saturated fat and cholesterol (6).

For preparing fast foods, the fried oil is used for several times in high temperature (because of economic reasons), and red meat and sausages are used; therefore cancer disease statistics may rise in future (7).

On the other hand, eating unhealthy food is the main reason for obese in childhood and causes heart attack and high blood pressure and diabetes in the next years. The prevention instituted reports almost 40% of children's food contains unhealthy fats and sugar and only 20% of children and adolescences 6-19 years old use fruits and vegetable. The results of an experiment on children educational function shows that 29% of them never eat fast foods while 10% of them eat fast food every day, and 4-10% eat fast food up to 6 times in a week. The rest of the samples eat fast foods 1-3 times in a week (3). Different experiments and research shows the main reasons of eating fast food are the change of traditional family style to modern style, their good taste and the fast and easy reach (8, 9).

Watching TV and low physical movement is one of the main reasons for improving fast food eating (10, 11). So according to the above-mentioned points attempts for changing adolescence food habits can decrease overweighting and other diseases among youth and teenagers (12, 13). This case study has been done to determine the fast foods usage among second-grade high school students in Ardakan (the capital city of Ardakan County, Yazd Province)

Methods

It was a cross-sectional descriptive study done by stratified sampling fits to volume, among 200 high school students in Ardakan. Data were collected by a 3-sections researcher made questionnaire by student interview. The questionnaire contains demographic specifications, 20 attitude questions about positive and negative aspects of fast foods and some questions about fast food usage. The ability and validity of the questionnaire has been approved. Attitude question's Cronbach's alphabet was 0.69. The hight and weight of the students were measured by a meter and a scale dial. All the data were analyzed by SPSS 16 and Chi-square, Fisher's exact test,T-test and ANOVA.

Results

The experiments results showed that 55% of the students were female and 45% were male. 93% were single and 7% were married. 62% of the

students were in grade two and three high school, and 38% were in pre-college level. The general family income of 27% of the samples was less than 1 million Tomans per month (less than 300 USD monthly), and 49% of the samples' income was between 1-2 million Tomans monthly (300-600 USD monthly) and 24% of samples had more than 2 million Tomans (more than 600 USD) monthly.

The samples' BMI was as follow: 22% thin (BMI< 18.5); 56% normal (18.5≤ BMI< 25); 14.5% overweight (25≤ BMI< 30); 6.5% fat (obsess) (BMI ≥30)

52.5% of the samples mentioned family as their source of getting nutrition data while 30% believes TV and Radio were their source.

Table 1. The average attitude score for eating take away foods according to marriage status, sex, and age the secondary high school students in Ardakan.

Attitude variable		Number	Average	Standard deviation	P_value
Marriage status	Single	186	71.58	6.36	0.0010
	Married	14	71.57	5.47	
Sex	Male	90	70.56	6.68	0.03
	Female	110	72.41	5.85	
Age	15-16 years old	90	69.44	5.71	0.001
	17-18 years old	110	73.33	6.22	
	Total	200	71.58	6.29	

Table 1 shows that female students had a more positive attitude towards fast foods and this difference was significant (P=0.03)

The average attitude score on eating fast food was more for 17-18 year old students in comparison to 15-16 year, old students, and this was significant. (P=0.001)

The average attitude score on eating fast food was more for the single students in comparison to the married students (P=0.001).

Table 2. The average attitude score for eating take away foods according to education and BMI for the secondary high school students in Ardakan.

Attitude variable		N	Average	SD	Middle	p_value
Education	Second and Third High School	124	70.59	5.80	71	0.004*
	Pre-university	76	73.19	6.27	73	
BMI	BMI< 18.5	45	70.51	5.89	70	0.03**
	18.5≤ BMI< 25	113	71.49	6.45	72	
	25≤ BMI< 30	29	72.68	5.93	74	
	BMI ≥30	13	73.61	6.83	75	
	SUM	200	71.58	6.29	72	

* T-test
**ANOVA

According to the experiments' results, the average attitude score on eating fast foods was 19173 for pre-colleague students that was way more than grade 2 and3 high school students (P= 0.004).

The average attitude score on eating fast foods for the base and overweight people was more than other groups (P= 0.03), and this was statistically significant.

Table 3. The average attitude score for eating take away foods according to Day, Week, Month, Year for the secondary high school students in Ardakan.

Frequency		Number	Percent
Zero		0	0
Every day		2	1
Week	Once	12	6
	More than twice	30	15
Monthly	Once	47	24
	More than twice	72	36
Yearly		36	18
Total		200	100

As the above table clearly shows; 1% of samples use fast foods daily, 21% use that weekly, 60% eat fast foods monthly, and 18% eat fast foods yearly.

Table 4. Distribution of the reasons for the consumption of instant foods in order of priority from the perspective of secondary high school students in Ardakan

The reasons for eating fast food		Priority 1	Priority 2	Priority 3	Priority 4	Priority 5	Priority 6	Priority 7	Priority 8
Children's tendency	N	25	23	29	34	25	8	25	31
	%	12.5	11.5	14.5	17	12.5	4	12.5	15.5
Too busy	N	6	25	19	29	28	17	36	40
	%	3	12.5	9.5	14.5	14	8.5	18	20
Good taste	N	139	26	18	7	4	2	3	1
	%	69.5	13	9	3.5	2	1	1.5	0.5
Quick ready	N	9	84	37	34	15	13	7	1
	%	4.5	42	18.5	17	7.5	6.5	3.5	0.5
Cheap and available	N	4	9	47	35	51	23	19	12
	%	2	4.5	23.5	17.5	25.5	11.5	9.5	6
Advertisement	N	0	3	6	20	27	53	31	60
	%	0	1.5	3	10	13.5	26.5	15.5	30
Fun	N	11	14	18	21	39	34	51	12
	%	5.5	7	9	10.5	19.5	17	25.5	6
Use it with family and friends	N	5	16	13	11.5	6.5	23.5	13.5	43
	%	2.5	8	13	11.5	6.5	23.5	13.5	21.5

The above table's results clarify the most important reasons for eating fast foods as their good taste, children's tendency to fast foods, being fast and easy and as a hobby too.

Discussion

Vast fast food advertisement nowadays causes youth and adolescences to have a tendency to fast foods. In this study, high school students in 2 grades were analyzed, and the results showed that female students have a more positive attitude towards eating fast foods which is in conformity with a study by Nora Alfairs (14).

These results are not in line with other done experiments (15-19). So we can conclude that as the female students in high school have good social relations and they are affected by their friends, so they have a more positive attitude towards fast food.

The experiment's results showed that the average attitude score for pre-colleague students was more than the tenth and eleventh grade students. The other same experiments like Mohr (19), satia(20), Rydell (21) and other researches (4, 18, 21-23) are in line with the present study. The

samples are young, healthy and fresh, so they pay less attention to their health. They are not aware of the fact that the most diseases are based in childhood and youth, so they eat a lot of fast foods. The achieved results are in the same line with Fazelpour experiments results, which showed that uneducated or low educated people like fast foods more than educated people. It also clarified that the young people achieve more knowledge and awareness about healthy eating. According to the results of this experiment, the average attitude score in single samples was more than married ones significantly.

The other experiment's results about marriage statue like Satia (20), Dave (16) and other (5, 8, 9, 18, 23, 24) were in the line with the results of the present study that the main reasons for eating fast foods are being busy with job or school and having no cooking skill.. Not being married, and having no awareness about healthy eating are rationalizations for eating fast foods. Friend's relation can affect this, too.

People with overweight have a more average score which matches with Nora Alfaris (14) as the female who uses more fast food's proteins have larger waist size and bigger hips (14).

These results are in the same line with other experiment's results like Satia (20) and others (9, 18, 25).

In addition, the above point shows the obese samples has less control over their diet and has more tendency for eating fatty and good taste foods.

Morse showed the family, magazine, newspapers, and friends as food data sources which is in line with the present study(15). Fazelpour studies(26) showed the same results about food data. Sources are the radio and TV and then the family. More than 50% determined family as their food data source and 30% radio and TV (27).

This shows the important role of family on the children's attitude and establishes correct and healthy food habits. On the other hand, it assumes the potential of visual and audio media power in social education which can be counted as a trustworthy source.

The experiment showed that 21% of students use fast foods weekly which match with the result of Larson et al. (27). As reported 23.6% of male and 22.8% of female students use fast foods more than three times a week (27) as fast food eating in Isfahan showed less percentage, this matches with Fazelpour study (26) results which clarified that the most amount of fast foods are eaten by 18-25 year old people. In Satia experiment, the samples usually eat in a fast food restaurant. These samples were younger, never married, physically enactive, overweight and taking no multivitamins (20), some other experiments assume low-educated people eat more fast foods because of their positive attitude (9, 21, 24).

The main reasons for eating fast foods in order of priority are their good taste and flavor, children's tendency towards fast foods, being fast and easy and having fast foods as a hobby.

Fazelpour research(26) showed the most important reasons for eating fast food in Yazd people in the order of priority:

Children's tendency, good taste and flavor, as a hobby for fun, fast and easy preparation, the possibility of eating fast foods with family and friends and also being busy. Other experiments show other reasons for eating fast foods like being cheap, comfort (8, 28) taste and flavor (8, 29) being with friends and having fun (8). These results are matched with Rydell (21) and Kristin (15), too.

Conclusion

What is notable and remarkable in these experiments is the children's tendency to eat fast foods. This shows an alarm for changing life style and food eating pattern in children which causes chronic illness in young ages. Suggestions for this research are:

1- As children receive their food eating data from social media and eating roots in society culture and family, so it is necessary that TV educational and advertisement shows be made.

2- As the second important reason for eating fast food after its good taste is children's tendency, so the food pattern must be corrected and made healthy.

3- Educate the youth families, adolescences, and children for choosing and eating healthy food according to the age, body size, food type and the energy of different foods.

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Conflict of Interest

The authors declare that they have no competing interests.

Authors' Contribution

All authors have contributed sufficiently in this research and are responsible for appropriate portions of the content.

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