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Study of Nutritional Awareness amongst College girls with Reference to Frequency of Junk Food Consumption

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Abstract: Junk foods are rich in calories, salt and fats. Junk foods become a prominent feature of the diet of youngsters in the developing country. Excess consumption of junk foods lead rise to wide variety of health disorders like; obesity, cardiovascular disease CVD type two diabetes, diverticulitis, bowl cancer constipation etc. The aim of present study was to know about junk foods eating habits of college going girls and their awareness regarding food quality, nutrients fact label and chemicals and their harmful effects present in junk food. Sample population was selected randomly by using disproportionate stratified sampling technique from Government M.H. College of Home Science and Science for Women (Autonomous), Jabalpur Madhya Pradesh. A pre structured questionnaire has prepared for the interview by the subjects. Each student has given sufficient time to understand the multiple choice questions and the response were recorded. The data was then arranged, tabulated and discussed upon and was presented with the help of tables and figures. The data was further statistically analysed by presenting the information through percentage. The analysis showed that 18% students were not aware about quality of food, nutritive value, chemical present and its harmful effect on health. Based on the study it was found out that 62.5 % of students had no idea for balanced diet, 78.2 % of individuals liked junk food for their taste as it was one of the predominant factor for their choice.While13.9 % were taking junk food as an alternative to regular meal. Only 21.5% had the habit of seeing the list of nutrients.37% of respondents, they had no idea about chemical and their safety level. Around 28.8% of students said they were not aware about consequences. In order to promote healthy food, the food manufacturer should produce healthy foods with good taste and an attractive presentation. Students will need to acquire the knowledge skills regarding the food habit this study concluded that the students partly aware about food quality, balanced diet, nutrients fact label, and harmful effects of excessive consumption of junk foods. This study highlights the need for educational program to raise the awareness of the health risk produced by intense consumption of such foods.

I. INTRODUCTION

Junk food simply means an empty calorie food. An empty food is a high calorie or calorie rich food which lacks in micronutrients such as vitamins, minirala, or amino acida and fiber (Ashkiran and deepthi, 2012). The term junk food was coined as slang in the public interest in 1972 by Michel Jacobson, Director of the Center for Science, Washington D.C.(Brendan, O Neill, 2006).Junk foods are rich in calories, salt and fats and poor in other nutrients. Common junk food includes fast food, chips, candies, gums, sweat disserts as well as alcoholic beverages (Phillips et al. 2004). India s fast food industry is growing by 40% a year. Statistics place india in 10th place in fast food per capita spending figures with 2.1of expenditure of annual total spending as per (Ashkiran and deepthi, 2012).Eat healthy and live healthy is one of the essential requirement of for long life. Unfortunately, today's word has been adapted to a system of consumption of foods which has several adverse effects on health. Excess consumption of junk foods lead rise to wide variety of health disorders like; obesity, cardiovascular disease CVD type two diabetes (hu et al. 2010), diverticulitis, bowl cancer constipation etc. Nature in 2007 states that preventable diseases caused mainly due to smoking, poor diet as junk food consumption and lack of exercise could kill millions in developing world in next 10 year. Obesity has increased rapidly in incidence to become a global issue today (Kestan et al. 2013; World Health Organization. 2013)Junk foods become a prominent feature of the diet of youngsters in the developing country. Many students have adapted to such changing fast-food trend culture. Several studies have found adolescents staying away from home is associated with increased consumption of these food with high calorie value (Larson et al. 2011) and poorer diet quality which finally ends up in weight gain. However, most adolescents may not be acquainted of the high calorie content of such items because the information is often not easily accessible in fast- food shops. High salt contents food can be act as addictive substances that stimulate the dopamine receptors in the brain, leading to increase in craving and hunger. It leads to increased appetite, calorie consumption, overeating, obesity and related illness (Cocores et al. 2009). Nowadays,

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unhealthy dietary habits are highly prevalent in the college going adolescents. Students should know that these kinds of eating habits create nutritional deficiencies along with weight gain which ultimately consequence in metabolic syndrome. Additionally, the development of a healthy lifestyle is important because a healthy body enhances academic performance (Giovannini et al. 2010; Gourdet et al. 2014; Egner et al. 20 14).Rapid changes in diet with increasing consumption of oil, fats and trans fats and decreasing consumption of vegetables and fruits are the factors fast food related health problems. Sometimes food additives are added to junk food to increase the shelf life, taste and also to preserve it from microbial contamination. The internal barriers to nutritional change include negative perception of healthy eating, the decreased taste difficulty in changing familiar eating habits, eating for comfort and the prioritization of mental health (Barre et al. 2011). Phosphorous containing food additive causes serious health effects on people with renal disorder (Sullivan et al. 2009). The present study planned to conduct a survey to determine the level of awareness, knowledge and attitude towards junk foods. The study has been taken with the following objectives:

To know about the choice preference of college going girls to elicit predisposing factors that make students consume junk foods

To assess the Level of awareness regarding food quality, nutrients fact label, chemicals present in food and their adverse effect among them.

II.   MATERIAL AND METHODS

The present work was conducted in Madhya Pradesh India. The population sample included students selected from government MH College of home Science and Science for women hostel, Jabalpur. The sample population 224 were randomly selected by using disproportionate stratified sampling technique for this study. All the participants were in the age group from 16-21 years. The data regarding the study was collected from both sources viz .primary and the secondary sources. Collection of primary Data was carried out by perceiving the views and ideas from girls through filling up of pre- structured questionnaire by interview method. Collection of secondary data was done by information obtained from various books, journals, newspapers, websites and university libraries. A single page questionnaire containing set of 10 multiple choice questions was prepared and distributed individually in their rooms. Before interview the students were given a brief overview about junk food and their ill effects. The information gathered and obtained for the study was carefully interpreted and condensed into master chart. The data was then arranged, tabulated and discussed upon and was presented with the help of tables and figures. The data was further statistically analysed by presenting the information through percentage.

A. Questionnaire
1) What is your favourite food among the following?
a) Fast food
b) Snacks
c) Soft drinks
d) Candies
2) Do you check food quality if bought from market?
a) Yes
b) No
c) Sometimes
d)   Never
3) Do you check the nutrient fact label in the food?
a) Yes
b)   No
c) Sometimes
d)   Never
4) Are you aware about the chemicals for preservation or colour present in food and its safety level?
a) Yes
b)   No
c)   No idea
d) Yes sometimes
5) Do you know the harmful effect of chemical present in food?
a) Yes

b) No
c) No idea
d) Yes sometimes
6) What are the factors influencing the choice of food
a) Time
b) Taste
c) Changing lifestyles
d) Influence of advertisement?
7) How many times do you eat these foods on an average per week?
a) Once or twice
b) Thrice
c) Four times
d) Five or more than five times
8) Do you know having such food on a daily basis makes you eat more calories?
a) Agree
b) Disagree
c) Sometimes
d) Never

III. RESULTS

A. Favourite Junk Food

The total sample size includes (N= 224 individuals).The types of junk foods preferred by students is given in table no. 2. Nearly 39 % respondents preferred snacks, followed by 36% of individuals who like fast food, 12% consumed soft drinks and the remaining 12% preferred to take candies.

Table no. 2Respondents favourite junk food

Favourite food items	Respondents counts (N=224)	N%
Fast food	81	36.2%
Snacks	88	39. 3%
Soft drinks	28	12.5
Candies	27	12.06

B. Junk Food Eating Habits

Three out of out of out of ten questions were asked to analyse eating habits of students. The responses for whether the junk food serves as an alternative to regular meal is given figure no. 2. Around 4% individuals indicated that they never take junk food as an alternative to regular meal, while 20% of girls simply denied, 61% of students indicated that they would take sometimes, very least quantity 13% indicated that they would take junk food as an alternative to regular meal. And when the students were asked to select the factor that influences them in selecting the type of junk food, 78% opted for taste, 9% for time, 5% opted for changing life style and remaining 5% opted for influence of advertisement as given in figure no. 1.

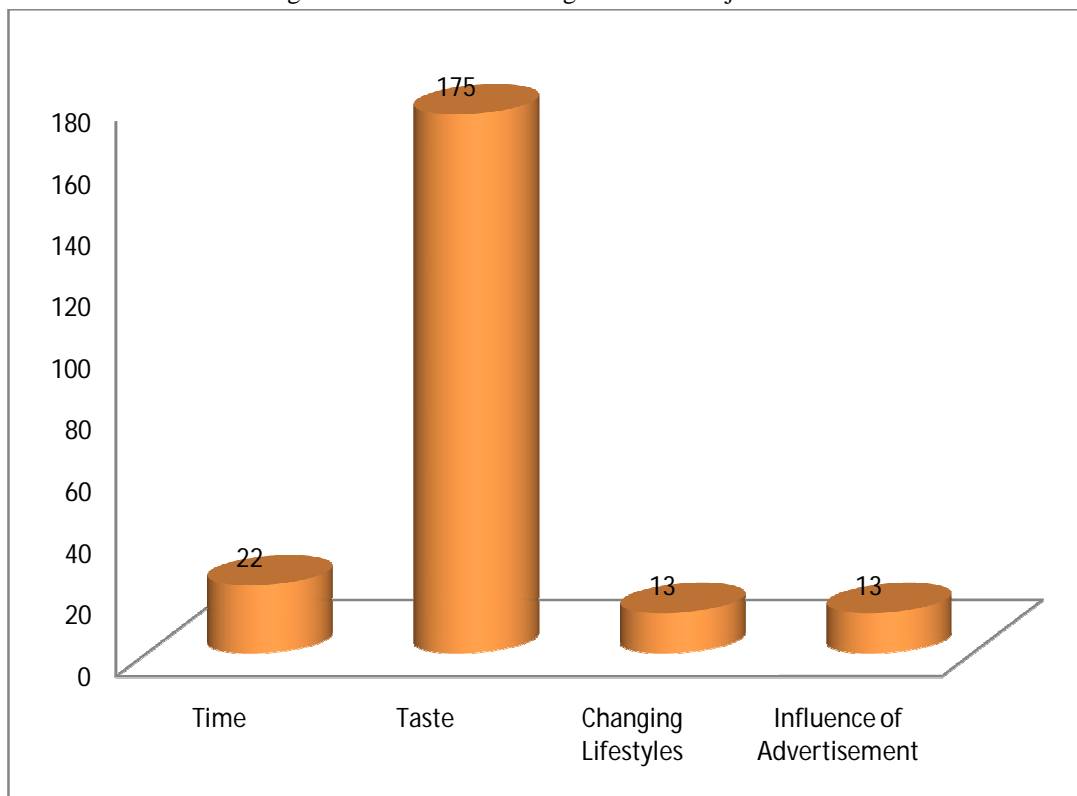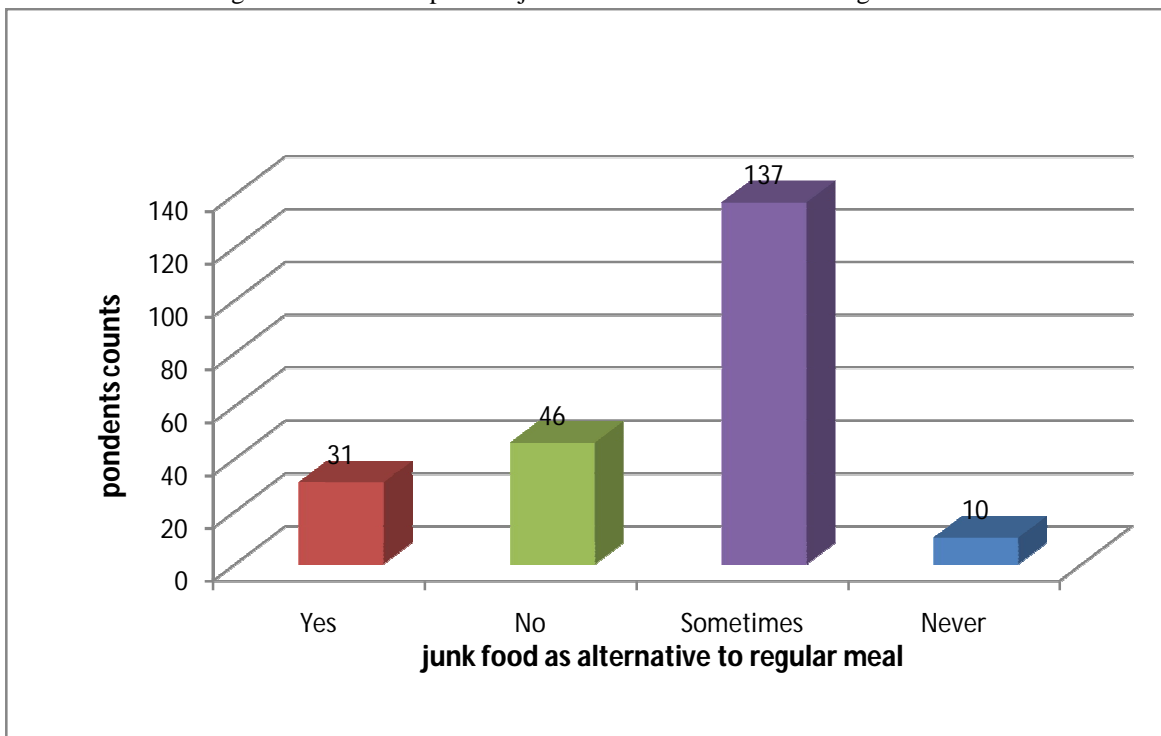Figure no. 1:factors affecting the choice of junk food

Figure no. 2:consumption of junk food as an alternative to regular meal

From figure no. three it was found out that 62% opted for once or twice per week, 17% of students opted for three times per week, 12% for four times and only 8% of respondents opted for five or more than five times per week.

Figure no. 3: number of serving of junk food by individual in per week
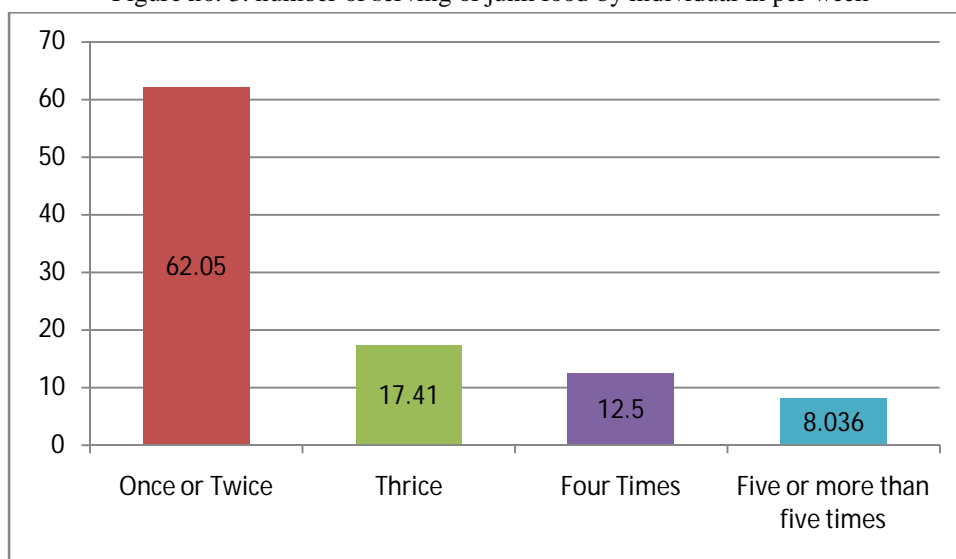
C. Awareness About The Junk Food

Out of ten questions four questions were asked to analyse students' awareness level about junk food. About 53% of respondents said that they check food quality sometimes; followed by 35% respondents who check food quality regularly, 8% of students said they don't check the quality and only 3% of students who never check the quality of foods. For the question related to nutrients fact label awareness, 9.4 % of respondents said they did never check the nutrients label, followed by 21.5% of respondents checked the label, 24.2% who did not check the label and about 45% of majority checked sometimes. In the case of chemicals and their safety level related information, only 7.2% of respondents were aware of it, 25.5% of students were unaware, 30. 4% of students have specified that they had some idea about some chemical and their safety level and 37% of respondents; they had no idea about chemical and their safety level. When asked about harmful effect of chemical present in junk food, 47.4% of respondents said they had some idea about harmful effects of chemicals in junk food, around 28.8% of students said they were not aware about consequences, and 23.6 % were opted for yes they were aware about it. Responses to various parameters such as food quality, nutrients fact label, chemical safety level and its harmful effects are given in figure four.

Figure no. 4: responses to various parameters such as food quality, nutrients fact label   chemical safety level and its harmful effects
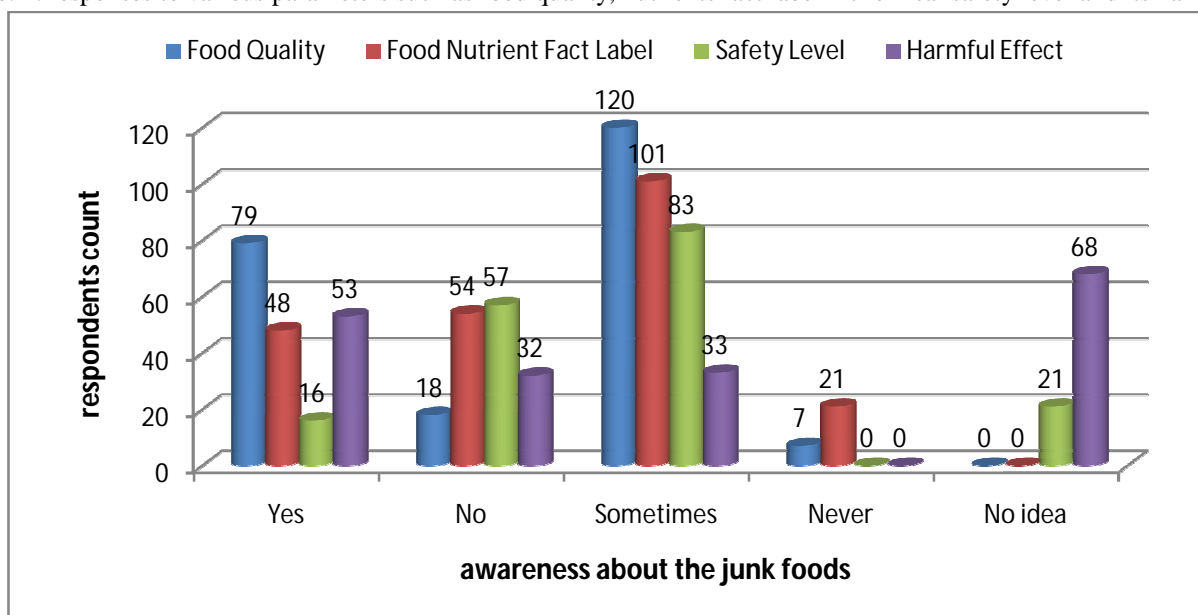
D.   Opinion about Balanced Diet

In the figure five it is evident that about 40% of individuals agreed that junk food consumption makes person to eat more calorie, while 40% of respondents chosen for sometimes for the same, 13% elected for never and only 7% of students have disagreed for the same. From the figure six data depicted that nearly 62 % of students, they were opted for no or no idea about balanced diet, followed by 30% have some idea and only very few 8% students were attentive for balanced diet.

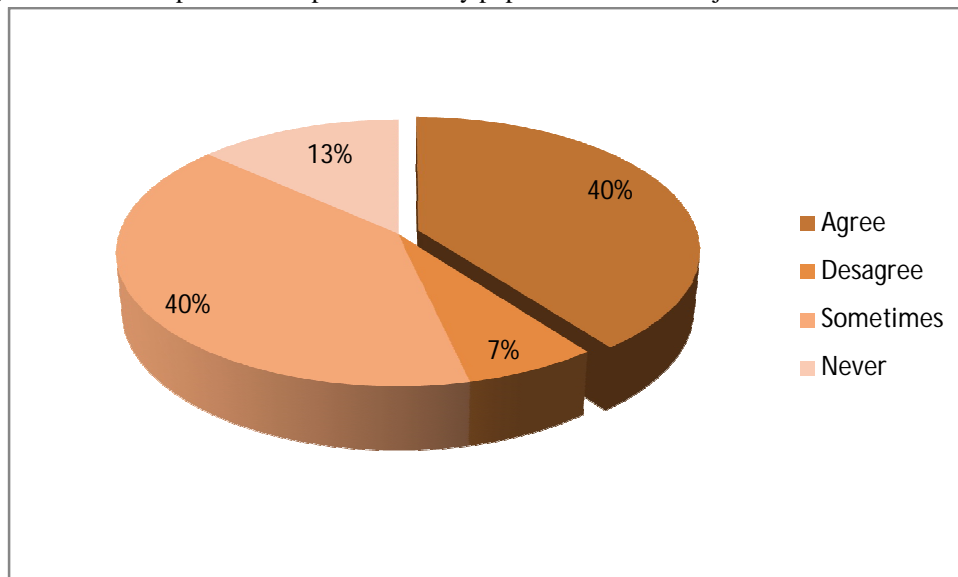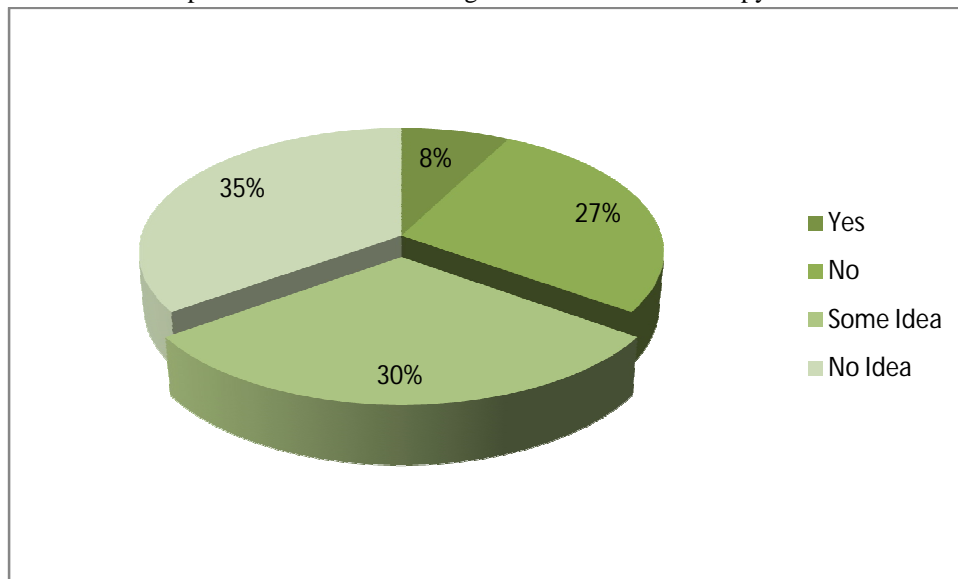Figure no. 5:data represent the opinion of study population n whether junk food is addictive or not

Figure no. 6: Data represent students' knowledge level towards the food pyramid for balanced diet

IV.   DISCUSSION

This study described eating habits, awareness about junk food and opinions for balanced diet of college going girls. About 36% of students were preferred fast food and 39% liked snacks. thamarai et al. (2015) reported that consuming chips and popcorns in adolscents had been associated more during watching movie. This is consistent with the study carried out by Gopal et al. (2012).Over weight and obesity are significantly linked to unhealthy dietary pattern, physical inactivity and misperception of body image (Hoque et al. 2016). An important finding in this study was that the Majority of students were not knowledge about balanced

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diet, similar result fund by thamarai et al. (2015). Vaida et al. (2013) stated that taste attract maximum percent of respondents while going to fast food. Our result confirmed that 78 % prefer the fast foods based on the taste, 9% choose because of time, 5% opted for changing life style and 5% elect because of advertisement. This is consistent with numerous study the food advertisement affect food choices, preferences, attitude and nutritional knowledge (Storey and French, 2004). In this study 62 % of respondents ate junk food once or twice on an average per week. Those who ate fast food more than twice a week were more likely to gain weight and develop insulin resistance (Vartanian et al. 2007). Our study showed that only 7 % of students were aware of the chemical present and its safety level which is considerably a low level. Thus our study revealed that among the sample population many individual are unaware about the chemicals added to the junk foods. Phosphate – containing soda drinks can affect functionality of different organ system, as was first reported more than a century ago (Haig, 1989). Surprisingly, only 21.5% had the habit of seeing the list of nutrient. Thus, considerably lower percentage of population (n=224) knew about food facts. Our findings showed that about 40% of individuals agreed that junk food consumption makes person to eat more calorie as suggested by Gopal et al. (2012). The inclusion of junk food as replacement for regular meal in their dietary plan is suggested by the fact that 61% (which is a high percentage) of respondents said that sometimes they consume junk food products. SzePui Pamela et al. (2011), stated that breakfast skipping was associated with gaining weight, obes and addicted to unhealthy dietary habits including more frequent junk foods. Therefore, in order to promote healthy food, the food manufacturer should produce healthy foods with good taste and an attractive presentation. Students will need to acquire the knowledge skills regarding the food habits.

V. CONCLUSION

This study concluded that the students partly aware about food quality, balanced diet, nutrients fact label, and harmful effects of excessive consumption of junk foods. The present study on survey on college going girls revealed that there is a gap between the awareness pertaining to a nutritious diet and the practice of consuming. This study highlights the need for interventional steps and educational program to raise the awareness of the health risk produced by intense consumption of such foods and also increase the knowledge of a balance diet. Colleges should provide nutritionists who impose dietary guidelines for students to raise the awareness of the risk posed by dietary items with hidden ingredients which will affect the health of the society.

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