

Knowledge about Difference between Health Food and Diet among Nursing Students at University of Bisha, Saudi Arabia

⁽¹⁾Eman Elsayed Hussein, ⁽²⁾Fouz Mohammed Alshehri, ⁽³⁾Nora Saeed Alahmari, ⁽⁴⁾Reem Moshabab Alahmari, ⁽⁵⁾Badreeh Abdullah Alahmari, ⁽⁶⁾Amal Mohammed Alshehri, ⁽⁷⁾Manal Mohammed Alamri, ⁽⁸⁾Waad Abdullah Alshehri, ⁽⁹⁾Wejdan Abdullah Alshehri, ⁽¹⁰⁾Asma Ali Alshehri

⁽¹⁾ Assistance professor, medical surgical nursing, applied medical science college at Alnamas, Bisha University

^{(2)- (10)} graduate students, applied medical science college at Alnamas, Bisha University

Corresponding author: ⁽¹⁾Eman Elsayed Hussein ,assistance professor, medical surgical nursing, Bisha university

Email: eman.ehab5555@gmail.com

Abstract: Health Food requires proper swallowing, and equally important absorption of vitamins, minerals, and dietary energy in the form of carbohydrates, proteins, and fats. Food habits and choices play an important role in health and mortality. The study aimed to evaluate knowledge about difference between healthy food and diet among nursing students at Bisha university. **Design:** Descriptive cross-sectional design. **Setting:** the study carried out at applied medical science college in Bisha University, Saudi Arabia. **Sample:** multi-stage technique sample. The study was conducted among 331 nursing students from both genders and from all level of nursing collage at Bisha University. Strata sampling was selected from each level from first to eighth level. **Tools:** two tools were used to collect the necessary data, first tool; personal data and healthy food and diet, second tool; assess knowledge about healthy food which consist three items indicated for difference between healthy food and diet, follow special food and affect their life activity. **Results:** The students of the College of Nursing have a high cognitive level of the difference between healthy food and diet. **Conclusion and recommendations:** This study concluded that students face a problem with regularity on integrated healthy meals for several different reasons, including customs, traditions, society, and the university environment. The study recommended that Providing healthy food at the university and instructing students to acquire it. Creative and effective nutrition education programs exist in university. Also conducting other studies to measure the impact of culture and society on knowing the difference between healthy eating and diet.

Keywords: Knowledge, health, food, diet, healthy food.

1. INTRODUCTION

Diet is an important modifiable risk factor for dementia. To date, much of the research regarding diet and brain health has been conducted on single foods or nutrients, whereas the dietary pattern approach has been less researched in the field. There are 2 main approaches for dietary patterns: the data driven approach and diet quality indices. Diet quality indices are particularly important as they often reflect adherence to national dietary guideline recommendations and the best diet for health and well-being. (Talegawkaet al.,2020).

Diet quality is critically important to the prevention of many types of chronic disease. The federal government provides recommendations for optimal diet quality through the Dietary Guidelines for Americans and sets benchmarks for progress toward these recommendations through the Healthy People objectives. (Wilson,2016).

The importance of nutrition, as an integral part of the solution to many societal, environmental, and economic challenges facing the world, has just started to be fully appreciated. The American Society for Nutrition (ASN) has identified the “grand” challenges facing nutrition research and science in the 21st century, termed “Nutrition Research Needs.” Findings from these Nutrition Research Needs will elucidate strategies that can be applied toward the prevention and treatment of both infectious and non-communicable diseases, including cardiovascular disease, diabetes, and cancer. Nutrition research holds the key to increasing our understanding of the underlying causes of obesity and its related comorbidities and thus holds promise to markedly influence global economies. Knowledge about adequate nutrition also has an important role in reducing or ending global and domestic food insecurity through direct and purposeful agricultural practices. Population growth will undeniably lead to increased global demand for a safe, available, sustainable, and affordable food supply, while continuing to demand nutritional adequacy (Ohlhorst, 2013).

Individual differences in food likes and desires develop throughout life because of differing food experiences and attitudes. The decision to eat, and to eat foods, varies for different individuals and situations. Food choices are influenced by many internal and external cues and are not solely determined by physiological or nutritional needs. Some of the factors which influence food choice include: biological determinants such as hunger, appetite and taste; economic determinants such as cost, income, availability; physical determinants such as access, education, skills (e.g. cooking) and time; social determinants like culture, family, peers and meal patterns; psychological determinants such as mood, stress, guilty; attitudes, beliefs and knowledge about food (Epuru&AlShammary,2014).

The argument that food costs influence diet quality and so contribute to the observed social inequalities in health is not new. The classic 1936 work of John Boyd Orr, Food, Health, and Income documented the existence of a social gradient in diets and health in Depression-era Great Britain. At the time, the method of grouping the population according to per capita incomes was new and open to criticism. George Orwell also commented on the dismal diets of the British working poor. Then, as now, lower-income groups had cheaper but lower-quality diets and worse health outcomes as compared with the rich. (Darmon, 2015).

The low cost of calories from added sugars and fats in relation to diets and health was also noted by James et al. The argument was that food and nutrition played a key part in social inequalities in health, with poor health resulting from buying “foods richer in energy (high in fat and sugar) to satisfy hunger, which are much cheaper per unit of energy than foods rich in protective nutrients (like fruits and vegetables).” The social disparities in diet and health, observed in Britain at the time, were said to be widening. According to very recent data from the United States, they are continuing to grow. (Darmon, 2015).

Sensory factors were the most important motives for food choice, followed by price and safety. Consumers with convenience and price orientation in their food choices were less inclined to buy organic products while consumers open to novelties and willing to try new foods more often declared to buy organic products. Polish consumers conceptualize organic food referring to aspects such as healthiness and safety. Despite the developments observed in the organic food sector in Poland, the information related that barriers to buy organic food still prevail. (Żakowska-Biemans, 2011).

Nutrition and dietary behaviors are major contributors to the development and management of chronic diseases including obesity, cardio metabolic disease, and cancer, but healthcare providers remain inadequately trained to initiate or effect patient change. Adherence to recommended eating patterns can reduce risk and extend quality of life, but consistent and coordinated approaches to assuring the education, training, and competency of healthcare providers remain inconsistent. (Van Horn et al., 2019).

Emerging evidence suggests an association between dietary habits and cognitive performance. Oxidative stress has long been considered to play a major role in cognitive decline and neurodegenerative disorders. Thus, it is plausible that, by counteracting oxidative stress, antioxidant-rich foods might afford protection from neurodegenerative diseases. (Valls-Pedret, 2015).

Nutrition education programs are designed to improve nutrition knowledge, with the aim of supporting sound dietary intake within the community or a specific target population. Nutrition education is widespread, with schools, government and health promotion agencies delivering a range of messages that incorporate a nutrition component. Members of the community in most industrialized countries are exposed to education about dietary guidelines or core food group intake.

Specific education to prevent or manage lifestyle diseases such as diabetes, CVD or cancer is also widely available. Despite the wide scope of nutrition education initiatives, it is somewhat surprising that relatively few studies have evaluated the level of nutrition knowledge in the general community or other specific group samples, and that the impact of nutrition knowledge on dietary intake is still largely unexplored (Spronk,2014).

Significance of the study

Being healthy is now part of the students' lifestyle in general. Several students, when trying to follow a healthy lifestyle and heaving integrated nourishment fall into developing misconceptions between healthy eating and dieting. The difference between diet and health food is dependent on balance between type of food being consuming and amount. Mistaken between them can lead to destructive physiological health.

However, because of the prevalence of this problem and low investigation we conduct this study to determine level of awareness toward difference between healthy food and diet among nursing students at Bisha university and work to enhance it.

Aim of the study:

Aim of this study is to evaluate knowledge about difference between healthy food and diet among nursing students at Bisha University.

Research Question:

What is the level of Knowledge about difference between healthy food and diet among nursing students at Bisha University?

2. SUBJECTS AND METHOD

Study design

A descriptive cross-sectional study used to examine variables at a single point in time.

Setting

This study was conducted in nursing applied science college at Al-Namas in Bisha University, Saudi Arabia.

Study population and sample size

The study population were nursing students from both genders from their branches and from all levels of nursing collage at (Bisha female, Bisha male, Al-Namas, Bilqarn) their total number was (725). Sample is multistage sample was selected. The study sample will be (331) Participants and fulfilled the questionnaire on-line. The sample type: strata sampling type take 5% from each level from first to eight level students enrolled under graduate during 1443 and accept participate in study

Tools of data collection:

This study designed by the researchers based on relevant literature were. The questionnaire is developed by the researchers. It is required about 15 min to be completed. Two tools were used as **parts: Part 1:** personal data such as name, age, education, marital status, healthy food, diet. **Part 2:** knowledge about healthy food which is consist of 3 items:

- The difference between healthy food and diet. Is healthy food or special food to follow a diet always available? And Affect their daily life activity

Content Validity

Validity of the questionnaire is assessed through expert opinion; it was presented to 5 doctors in the college who have experience in this field.

Pilot Study

A pilot study was be carried out on a (10 %) of the study sample approximately 25 students from the college to assess whether is it clear or not, their notes were taken into consideration and modified, the questionnaire consumed (15)

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minutes to be filled. It was done to test the applicability, feasibility of the tools and to determine the time needed to fill- in the forms. The necessary modifications were done according to the result of pilot study and the tool was finalized.

Ethical considerations

The study protocol was approved by the research and Committee at the Faculty of Nursing, Bisha University, a full brief explanation about the aim and importance of the study was provided to the participating nursing students. They were reassured about the confidentiality and anonymity of any information obtained, and informed consent was obtained from each participant.

Field of work:

The recruitment of nursing students was done according to the eligibility criteria. The eligible students were invited to participate, and were provided a full explanation of the study aim and maneuvers, along with re-assurance of their rights. Each student who consented to participate questionnaire sheet. This provided their level of knowledge and attitude. Then, each one accompanied her or his health food assessment using the corresponding checklist.

The Field work lasted from September 2021 to 13 December 2021. The work was done by (15) minutes to be filled. Conducted to evaluate knowledge about difference between healthy food and diet among nursing students at Bisha University.

Data analysis

Package for the social sciences (SPSS) version 20.0 were used to analyze data. Data were presented using descriptive statistics in the form of frequencies and percentages for qualitative variables, and mean and standard deviations and medians for quantitative variables. A type of quantitative research is designed to look at variables in the population at a given point in time. Quantitative Research is used to quantify the problem by generating numerical data or data that can be transformed into statistics. It is used to quantify attitudes, opinions, behaviors, and other defined variables. Quantitative Research uses measurable data to formulate facts.

3. RESULTS

Table (1): Demographic characteristics of study subject (N=331)

Characteristic	NO (331)	percentage (100%)
Sex		
Male	95	28.7
Female	236	71.3
Age		
18-20	87	26.3
21-23	86	26
24-26	158	47.7
Level of study		
Level 3	53	16
Level 4	33	10
Level 5	30	9.1
Level 6	40	12.1
Level 7	51	15.4
Level 8	124	37.5
Social status		
Unmarried	231	69.8
married	84	25.4
Divorced	14	4.2
Widow	2	0.6

Table 1. Illustrates socio-demographic characteristics of studied subject that according to result the highest percentage of study subject (71.3%) was in female however the lowest percentage (28.7%) was in male. regarding age the highest percentage of study subject (47.7%) was in 24-26 which however the lowest percentage (26%) was in 21-23. According to this table the majority of study subjects (37.5%) were in level 8 of study however the lowest percentage (9.1%) was in level 5. According to social statue the highest percentage of study subject (69.8 %) was single people however the lowest percentage (2%) was in widow.

Table (2): Percent distribution of study subject related to the decision to choose a diet (N=331)

When do you decide to follow a diet?	No (331)	Percentage (100%)
<ul style="list-style-type: none"> • Weight gain • When the doctor recommends it • Other • I do not know 	182 65 49 35	55% 19.6% 14.8% 10.6%
When you want to follow a diet, what do you do? <ul style="list-style-type: none"> • Buy healthy, organic foods only. • Visiting a registered dietitian • Distributing my food rations while calculating my daily caloric requirement • Exercising without diet or healthy food • Other 	48 84 137 41 21	14.5% 25.4% 41.4% 12.4% 6.3%
If you made the decision to follow a diet to weight-loss, what would be your most appropriate option? <ul style="list-style-type: none"> • Healthy food in reasonable quantities and exercise • Calculating daily calories, following a healthy diet, and exercising • Healthy food in large quantities and exercise • Unhealthy food, small amounts, and exercise 	131 152 32 16	39.6% 45.9% 9.7% 4.8%
If you made the decision to follow a diet to gain weight, what would be your most appropriate option? <ul style="list-style-type: none"> • Eat foods full of fat to gain weight faster only. • Eat healthy food in large quantities without exercising. • Calculating daily calories, following a healthy diet, and exercising • More sweets and soft drinks, healthy meals, and exercise 	62 68 184 17	18.7% 20.5% 55.6% 5.2%

Table 2 Percent distribution of study subject related to the decision to choose a diet. According to this table the majority of study subjects (55%) were decided to gain weight and the lowest percentage of study subjects (10.6%) do not know when to make the decision to follow a diet. Regarding the action they do when they decide to follow a diet the majority of study subjects (41.4%) were distributing their food rations while calculating daily caloric requirement however the lowest percentage of study subjects (6.3%) do other things. According to this table the most appropriate option the students do if they are made the decision to follow a diet to weight-loss (45.9%) the majority were Calculating daily calories, following a healthy diet, and exercising however the lowest percentage of study subjects (4.8%) were eat Unhealthy food, small amounts, and exercise. According to this table the most appropriate option the students do if they are made the decision to follow a diet to gain- weight (55.6%) the majority were Calculating daily calories, following a healthy diet, and exercising

however the lowest percentage of study subjects (5.2%) were eat more sweets and soft drinks, healthy meals, and exercise.

Table (3) A: Percent distribution of study subject related to knowledge about food (N=331)

ITEMS	YES		NO		DON'T KNOW		TOTAL	
	NO	%	NO	%	NO	%	NO	%
Is most of the food you eat is considered nutritious?	166	50.2%	130	39.3%	35	10.6%	331	100%
Are most restaurants in the area serving healthy meals?	74	22.4%	221	66.8%	36	10.9%	331	100%
Do you think that nutritional supplements may cause weight stability?	98	29.6%	131	36.6%	102	30.8	331	100%
Do you think that nutritional supplements may cause weight gain?	151	45.6%	99	29.9%	81	24.5%	331	100%
Does eating unhealthy food in small quantities does not affect the diet?	131	39.6%	132	39.9%	68	20.5%	331	100%

Table 3 A Percent distribution of study subject related to knowledge about food. According to this table the majority of study subjects (50.2%) most of the food they eat is considered NOT nutritious however the lowest percentage of study subjects (10.6%) don't know. Regarding if restaurants in the area serving healthy meals the majority of study subjects (66.8%) was NOT however the lowest percentage of study subjects (10.9%) don't know. Regarding if they think that nutritional supplements may cause weight stability the majority of study subjects (36.6%) was NOT however the lowest percentage of study subjects (29.6%) was yes. Regarding if they think that nutritional supplements may cause weight to gain the majority of study subjects (45.6%) was YES however the lowest percentage of study subjects (24.5%) don't know. Regarding believes if eating unhealthy food in small quantities does not affect the diet, his majority of study subjects (39.9%) was NO, and the lowest percentage of study subjects (39.6%) was YES.

Table (3) B: Percent distribution of study subject related to knowledge about food (N=331)

Do you think that olive oil is a healthy option and not harmful to the body, and a lot of it does not increase weight? <ul style="list-style-type: none"> No, because olive oil is considered a fat, and its abundance is harmful, and it increases weight. Yes, because it is the only type of healthy oil and its abundance does not harm, but it has benefit and does not increase weight. I do not know 	NO (331)	Percentage (100%)
	123	37.2%
	152	45.9%
In your opinion, what is the difference between brown starches (such as: rice and brown bread) and white (such as: rice, white bread)? <ul style="list-style-type: none"> The brown food is healthier and less calories. There is no difference between them in terms of calories. Difference in nutritional value because the structure contains more fiber. I do not know 	56	16.9%
	83	25.1%
	52	15.7%
	159	48%
	37	11.2%

<p>If you are taking nutritional supplements, choose the reason from the following?</p> <ul style="list-style-type: none"> • I have a deficiency in some vitamins and minerals. • Follow a strict diet. • I eat healthy food, but it seems unbalanced and complete, as it is not sufficient for my nutritional needs. • Not taking it 	<p>130</p> <p>44</p> <p>70</p> <p>87</p>	<p>39.3%</p> <p>13.3%</p> <p>21.1%</p> <p>26.3%</p>
<p>Eating only fruits, vegetables and meat and avoiding carbohydrates and fats completely is considered?</p> <ul style="list-style-type: none"> • Healthy lifestyle • Diet • Diet and healthy lifestyle • Unhealthy lifestyle • Other 	<p>75</p> <p>61</p> <p>82</p> <p>86</p> <p>27</p>	<p>22.7%</p> <p>18.4%</p> <p>24.8%</p> <p>26%</p> <p>8.2%</p>
<p>Does following the diet mean depriving all delicious foods and being content with only boiled and grilled food, without adding flavorings and appetizers?</p> <ul style="list-style-type: none"> • Yes • No, we can eat whatever we like, but the method of preparation is healthy. • I do not know 	<p>56</p> <p>245</p> <p>30</p>	<p>16.9%</p> <p>74%</p> <p>9.1%</p>

Table 3-B illustrates the knowledgeable about food. According to olive oil healthy and if increased not harm to the body the highest percentage of study subject (45.9%) was yes because it is only type of healthy oil and its abundance does not harm however the lowest percentage (16.9%) was do not know. According to difference between brown and white starches the highest percentage of study subject (48%) was in nutritional value because the structure contains more fiber however the lowest percentage (11.2%) was do not know. According taking nutritional supplements the highest percentage of study subject (39.3%) was I have deficiency in some vitamin and mineral however the lowest percentage (13.3%) was following a strict diet. According eating only fruit and vegetables and meat considered. The highest percentage of study subject (26%) was unhealthy lifestyle however the lowest percentage (8.2%) was other. According follows healthy diet that mean depriving all delicious food the highest percentage of study subject (74%) was no, we can eat whatever we like, but methods of preparation are healthy however the lowest percentage (9.1%) was do not know.

Table (4): Percent distribution of study subject related personal life choices: (N=331)

What is the choice that you can make all your life?	No (331)	Percentage (100%)
• Eat what I like, talking into my account my daily calorie needs.	92	27.8%
• Eat whatever I like and in case of weight gain I follow a diet.	56	16.9%
• Follow a diet or healthy lifestyle to maintain the appropriate weight and health.	144	43.5%
• Other.	39	11.8%

Table 4 illustrates the personal life choices of food according to result the highest percentage of study subject (43.5%) was following a diet or healthy lifestyle to maintain the appropriate weight and health however the lowest percentage (11.8%) was other choice.

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Table (5): Percent distribution of study subject related to reasons for lack of awareness of adopting a healthy lifestyle: (N=331)

In your opinion as a student, why is there not enough awareness of students about adopting a healthy lifestyle?	No (331)	Percentage (100%)
<ul style="list-style-type: none"> • Not shedding enough light on it or paying attention to the topic. • Because our culture and society in general do not follow a healthy system so this topic may be ignored. • Community unwillingness to follow a healthy system. • Other. 	112	33.8%
	132	39.9%
	57	17.2%
	30	19.1%

Table 5 illustrates the reason for lack awareness of adopting a healthy lifestyle according to result the highest percentage of study subject (39.9%) was because our culture and society in general do not follow a healthy system, so this topic maybe ignored however the lowest percentage (17.2%) was community unwillingness to follow a healthy system.

Table (6): Percent distribution of study subject related to the health problems they suffer: (N=331)

If you suffer from a health problem, choices your problem:	Number (331)	Percentage (100%)
<ul style="list-style-type: none"> • Diabetes • Obesity • Malnutrition • High cholesterol • Underactive thyroid gland • Cardiovascular disease • Other • Do not suffer from chronic diseases 	33	10%
	9	2.7%
	23	9.7%
	38	11.5%
	11	3.3%
	11	3.3%
	37	10.9%
	157	47.4%

Table 6 illustrates the health problems they suffer from them according to result the highest percentage of study subject (47.4%) was do not suffer from chronic diseases however the lowest percentage (2.7%) was obesity.

Table (7): Percent distribution of study subject related to perception of healthy meal: (N=331)

What is an integrated healthy meal between them?	No (331)	Percentage (100%)
<ul style="list-style-type: none"> • Content of meal A: Protean, fiber, fat, carbohydrate (chicken, rice, olive oil, vegetable) • Content of meal B: fiber (Fruits and vegetables) 	253	67.4%
	78	23.6%

Table 7 illustrates the perception of healthy integrated meal according to result the highest percentage of study subject (67.4%) was the meal with vegetables and fruits and protein and carbohydrates however the lowest percentage (23.6%) was the meal with vegetables and fruits just.

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Table (8): Percent distribution of study subject related to the diet change: (N=331)

Are you thinking about changing your diet?	No (331)	Percentage (100%)
<ul style="list-style-type: none"> Yes, because I want to follow a healthy lifestyle. 	159	48%
<ul style="list-style-type: none"> Yes, because I suffer from some health problems. 	59	20.8%
<ul style="list-style-type: none"> No, because I do not need to lose or gain weight. 	70	21.1%
<ul style="list-style-type: none"> I do not know. 	33	10%

Table 8 illustrates the main reason for people thinking about changing their diet according to result the highest percentage of study subject (48%) was they want to follow a healthy lifestyle however the lowest percentage (10%) was do not know the reason.

Table (9): Percent distribution of study subject related to the Additional aspects related to the diet:(N=331)

	No (331)	Percentage (100%)
when a person is dieting, should he exercise? <ul style="list-style-type: none"> Yes, because exercise helps to burn fat and increase muscle density. No, because diet and healthy eating are enough to gain or lose weight. I do not know 	258	78.2%
	49	14.5%
	24	7.3%
Intermittent fasting is the type of diet or healthy food? <ul style="list-style-type: none"> Diet A healthy diet Both I do not know 	143	43.2%
	61	18.4%
	71	21.5%
	56	16.5%
Is the diet food, the first healthy food, limited to home food only? <ul style="list-style-type: none"> Yes, because home food is prepared with care and is therefore healthy. No, there are restaurants and stores that provide healthy food other than home. I do not know 	115	34.7%
	199	60.1%
	17	5.1%
In your opinion, is healthy food limited to weight loss only? <ul style="list-style-type: none"> Yes, because all healthy food does not contain fat, thus reducing weight. No, because a person can gain weight by increasing the amount of food, even if it is healthy. I do not know 	87	26.7%
	217	66.5%
	22	6.7%
When I follow a weight – loss diet, my calories should be? <ul style="list-style-type: none"> it equals to my daily caloric needs. Less than my daily caloric needs I do not care about calories as long there is their healthy food. I do not know 	165	49.8%
	99	29.9%
	38	11.5%
	29	8.8%

Table 9 illustrates the Additional aspects related to the diet. According to they should do exercise with diet the highest percentage of study subjects (78.2%) was yes because they help in increasing burn fat and muscle density and the lowest percentage of study subjects (7.3%) was do not know if should. According intermittent fasting the type of diet or healthy

food the majority of study subjects (43.2%) was diet however the lowest percentage of study subjects (16.5%) was do not know. According to the healthy food limited to home food only the highest percentage of study subjects (60.1%) was no, there are restaurants and stores.

FIGURE 1: Percentage Distribution knowledge about difference between healthy food and diet:

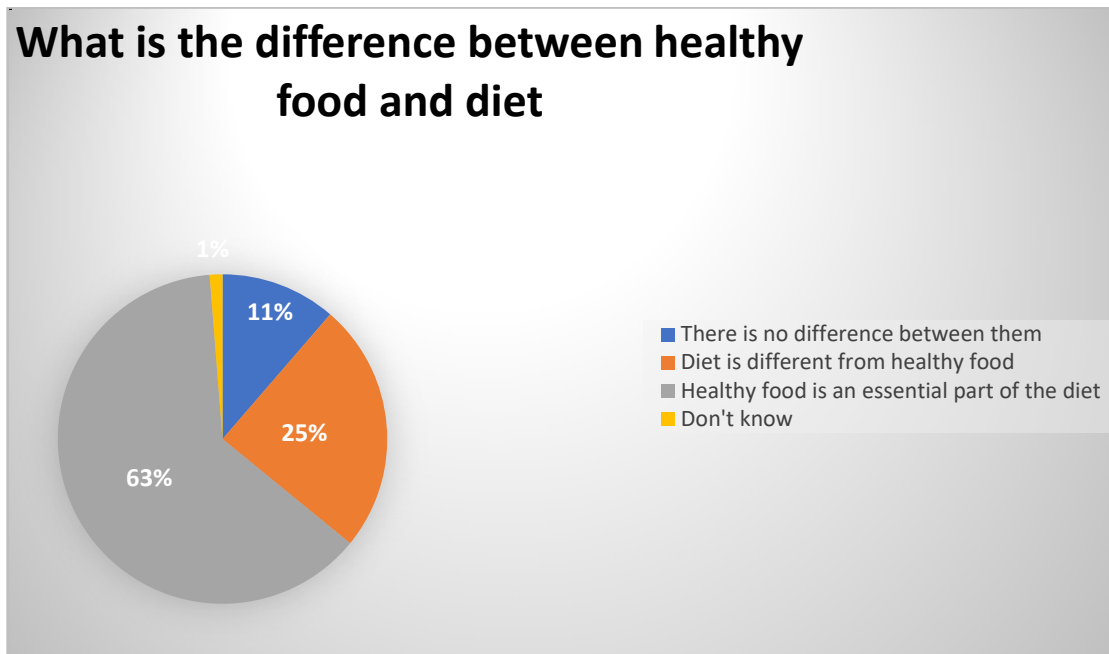


FIGURE 1 illustrates knowledge about difference between healthy food and diet that according to result the highest percentage of study subject (63%) was Healthy food is an essential part of the diet however the lowest percentage (1%) was do not know the difference.

FIGURE 2: Percentage distribution about the main goal of eating healthy foods and adopting a correct diet:

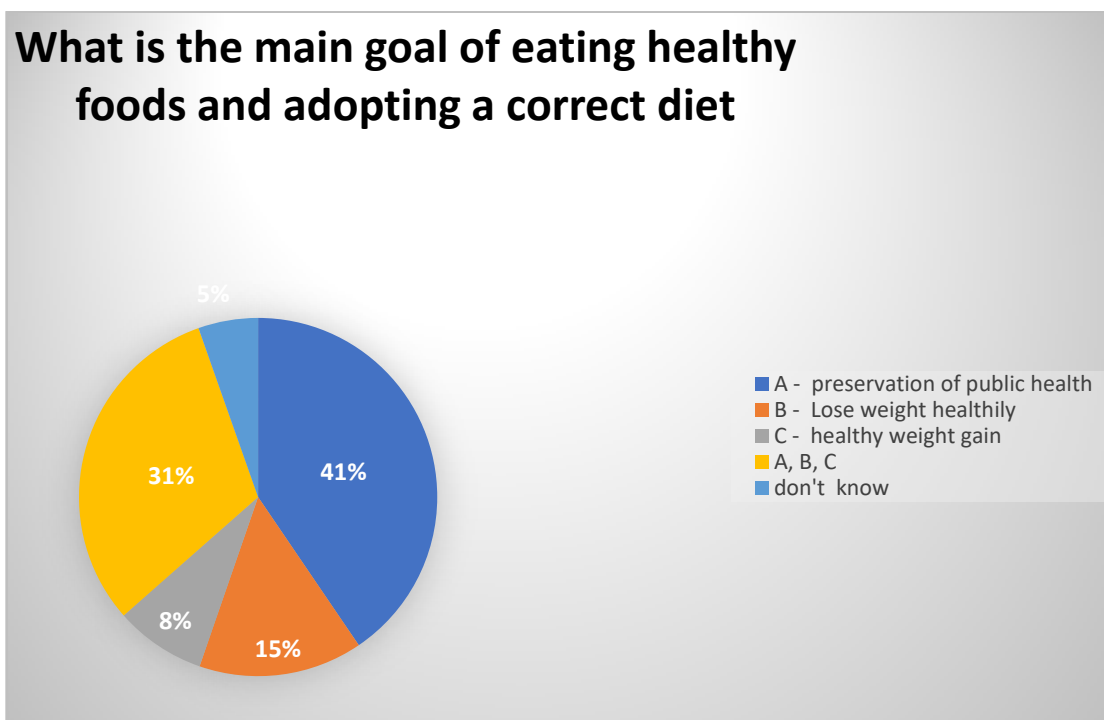


FIGURE 2 illustrates the main goal of eating healthy foods and adopting a correct diet according to result the highest percentage of study subject (41%) was preservation of public health however the lowest percentage (5%) was do not know the main goal.

FIGURE 3: Percentage distribution of the main reason for people do not follow a healthy lifestyle:

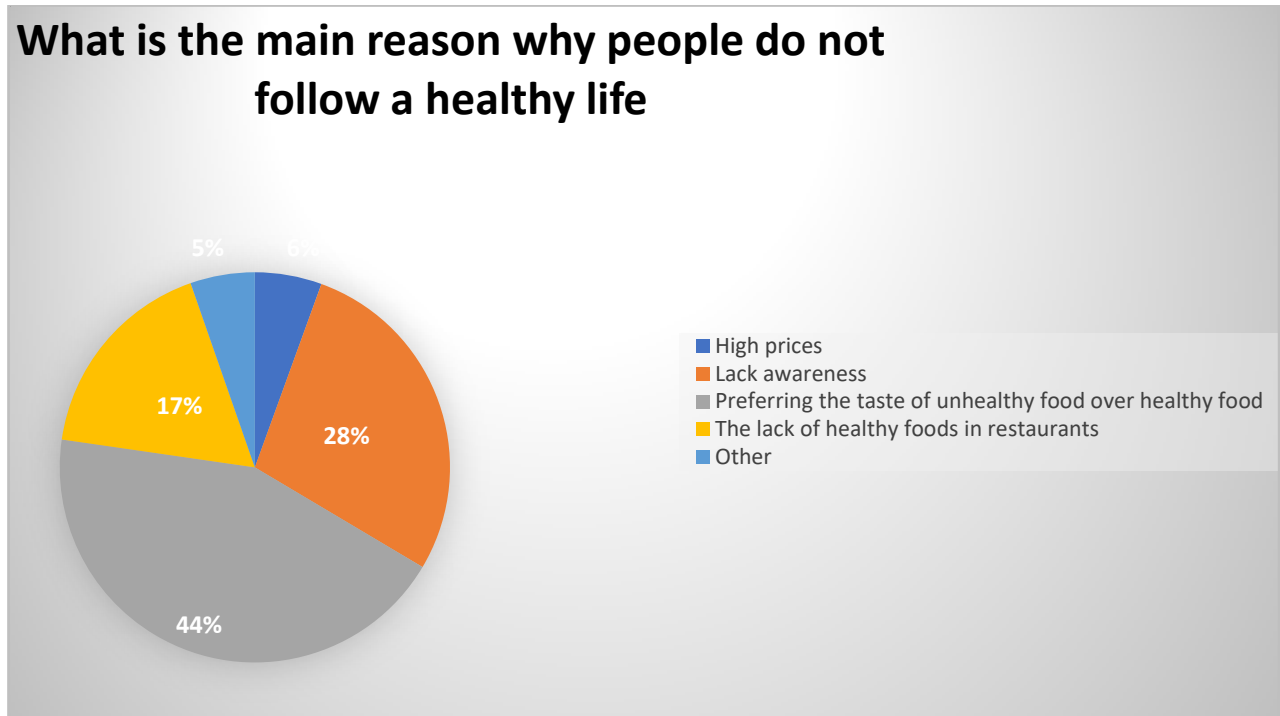


FIGURE 3 illustrates the main reason for people do not follow a healthy lifestyle according to result the highest percentage of study subject (44%) was preferring the taste of unhealthy food over healthy food however the lowest percentage (5%) was other reasons.

FIGURE 4: Percentage distribution of reason for not eating healthy food in university:

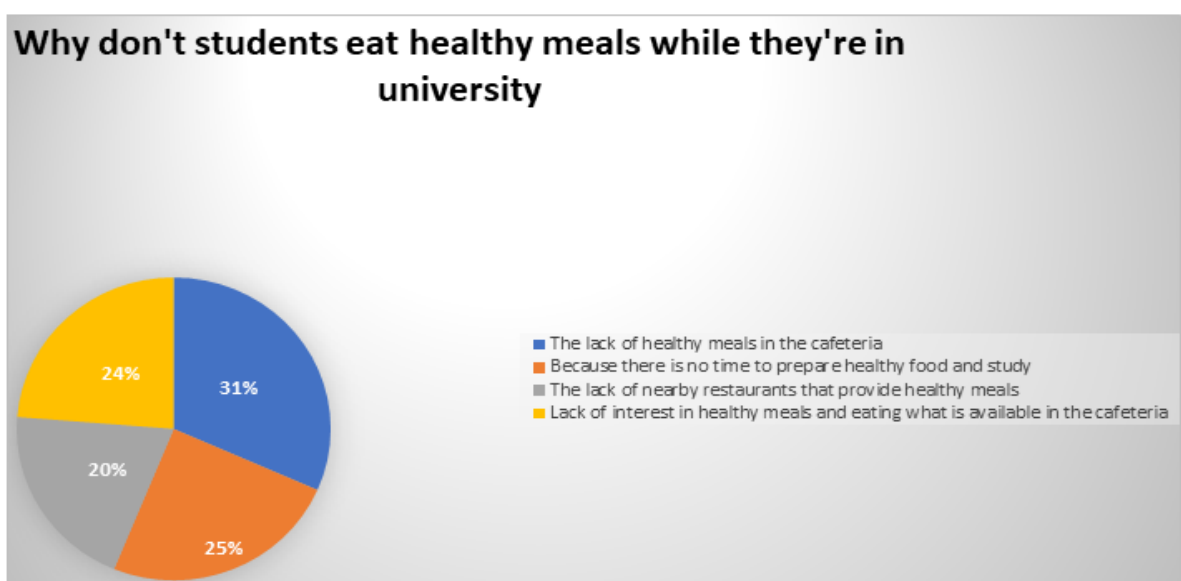


FIGURE 4 illustrates the reason for Students do not eat healthy meals while they are at the university according to result the highest percentage of study subject (31%) was lack of healthy meals in the cafeteria however the lowest percentage (20%) was lack of nearby restaurants that provide healthy meals.

4. DISCUSSION

Results from recent studies suggest that improved Given such consistent evidence, the 2015 Dietary Guidelines for Americans recommended the Alternate Healthy Eating Index, the Alternate Mediterranean Diet, and DASH as practical, understandable, and actionable diet plans for the public. Such guidelines are important in the United States and globally because unhealthy diets have been ranked as a major factor contributing to death and health complications (**Sotos-Prieto, 2017**).

Food insecurity is a growing public health problem for college students, with significant potential for adverse effects on both physical and mental health, and functioning. Food insecurity is defined as, "limited or uncertain availability of nutritionally adequate and safe food or limited or uncertain ability to acquire acceptable foods in socially acceptable ways" due to a lack of money or other resources. Previous research has documented a myriad of negative physical and mental health consequences of food insecurity among adults including decreased nutrient intake, increased mental health problems and depression, diabetes, obesity, hypertension, poor sleep, and lower self-rated health. In addition, a cross-sectional study of knowledge about Difference between Healthy Food and Diet, and adverse psychosocial development among school-aged and teenage students (**Payne-Sturges et al.,2018**).

Currently, worldwide many young adults are overweight or obese. During the past three decades, obesity among young adults has risen to an extent that it has become one of the biggest public health concerns worldwide, although young adults themselves believe they should eat healthier and know why they should do so. However, eating healthily is not that easy since young adults are targeted by many advertisements that are designed to encourage them to consume energy-dense Foods. In addition, most young adults have little knowledge of the nutrients they consume in daily life and therefore find it hard to distinguish healthy from unhealthy food products. Consequently, they develop eating habits that differ from patterns that are recommended for meeting national dietary reference intakes. Considering the societal, health, and economic consequences of the current food system, the food industry must take responsibility for young adults' health by focusing on the promotion of healthy food products they are selling rather than promoting unhealthy food products (**Folkvord et al.,2020**).

The relationship between healthy food and diet is complex. Everyone needs food to live, but too little food, too much food, or the wrong type of food has negative consequences for health. (Bleich et al.,2015). Given the fact, nutrition Knowledge is being more and more identified as important for healthy lifestyle; emphasis on proper nutrition is enormously increasing. Food choices vary widely but there is emerging evidence that university students may consume poor quality diets, with potential implications for body weight and long-term health. (**Sprake et al.,2018**).

Nutrition knowledge is a difficult construct to measure. Instruments may probe knowledge about functions of nutrients, their relevance to health, food sources or how to purchase, plan and prepare a diet that is healthy, nutritious, and suitable to individual needs. Nutrition knowledge encompasses what has been termed declarative knowledge of facts (e.g., food sources of protein) and procedural knowledge (e.g., how to plan, purchase and prepare food to make up a diet that has sufficient protein). Strong declarative knowledge without procedural skills may not translate to healthier dietary intake. Nutrition knowledge is also influenced by beliefs about food and nutrition, which may not be evidenced based but rather steeped in cultural or present secular thinking. Conflicting and evolving nutrition research, food product advertising, the complexity of behaviors needed to achieve healthy eating and strong media and Internet coverage of nutrition issues make it challenging for clear nutrition messages to translate at a population level. (**Spendlove,2011**)

In the past, general population nutritional campaigns have achieved limited success in terms of positive education regarding food and nutrition. In the future, the food industry should expand their research focus to individualized health. A paradigm shift from considering the cost of food to modifying foods to give value-added benefits should be considered in terms of health promotion from early life. What is the cost associated with adding nutrients to bring intake up to recommended levels? The economic impact of meeting 2010 federal dietary guidelines for Americans to consume more K, dietary fiber, vitamin D, Ca and to get less energy from saturated fat and added sugar has been examined for the adult population of King County, Washington. Increasing the consumption of K, the most expensive of the four recommended

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nutrients, was predicted to add US\$380 per year to the average consumer's food costs; meanwhile, each time consumers obtained 1 % more of their daily energy from saturated fat and added sugar, their food costs significantly declined. Thus, improving diet will require additional guidance for consumers, especially those with little budget flexibility, and new policies to increase the availability and reduce the cost of healthy foods. (Lenoir-Wijnkoop,2013).

5. CONCLUSION

The result of the study concluded that the Students of the College of Nursing at Bisha University have a high level of knowledge of the difference between healthy food and diet. More than half of the students believe that healthy food is an essential part of a diet. The diet does not mean deprivation of delicious food rich in flavor, but a problem in preparing food in a healthy way, in addition to the local culture, customs, traditions, and society that does not follow a healthy diet and does not encourage this. More than half of the students believe that the reason for not eating healthy food at the university is the lack of healthy meals in the cafeteria.

6. RECOMMENDATION

Based on the results of this study,

- Creative and effective nutrition education programs exist in university.
- Providing healthy food at the university and instructing students to acquire it.
- Conducting other studies to measure the impact of culture and society on knowing the difference between healthy eating and diet.

7. LIMITATION

We faced some Limitation when preparing the research. Time was a big constraint so more time could not be devoted to individual respondents, and the busy schedule of respondents also makes the collection of information a difficult one. Unequal number of females and males in the sample and that because, Difficulties in contributing the questionnaires to males. Lack of student interaction in the initiative, answering the questionnaire.

REFERENCES

- [1] **Żakowska-Biemans, S. (2011)**, "Polish consumer food choices and beliefs about organic food", *British Food Journal*, Vol. 113 No. 1, pp. 122137. DOI: <https://doi.org/10.1108/00070701111097385>.
- [2] **Memish, ZA. et al. Obesity and associated factors—Kingdom of Saudi Arabia, 2013.** *Prev Chronic Dis.* 2014 Oct 9;11:E174. doi: 10.5888/pcd11.140236.
- [3] **Valls-Pedret, C. et al.(2015).** Mediterranean Diet and Age-Related Cognitive Decline. *JAMA Intern Med.* 2015;175(7):1094-1103. doi:10.1001/jamainternmed.2015.1668.
- [4] **Hooper L, Abdelhamid A, Bunn D, Brown T, Summerbell CD, Skeaff CM (2015):** . Effects of total fat intake on body weight. *Cochrane Database Syst Rev.* 2015 Aug 7;(8):CD011834. doi: 10.1002/14651858.CD011834.
- [5] **Folkvord, F. et al. (2020).** Taste and Health Information on Fast Food Menus to Encourage Young Adults to Choose Healthy Food Products: An Experimental Study. *International journal of environmental research and public health*, 17 (19), 26-30. DOI:10.3390/ijerph17197139.
- [6] **Sprake, E.F., Russell, M.J., Cecil, E.J., Cooper, R.J., Grabowski, P., Pourshahidi, k.I., &Barker, M.E. (2018).** Dietary patterns of university students in the UK: a cross-sectional study. *Nutrition Journal.* 90,1-17. doi: 10.1186/s12937-018-0398-y.
- [7] **Bleich, S.N., Smith, J. J., Wolfson, J.A., Zhu, X., &Story, M. (2015).** The Complex Relationship Between Diet and Health. *Health affairs (Project Hope)*, 34(11), 1-8. doi.org/10.1377/hlthaff.2015.0606
- [8] **Epuru, S., & Al Shammery, M.U. (2014).** Nutrition Knowledge and its Impact on Food Choices among the students of Saudi Arabia. *Journal of Dental and Medical Sciences (IOSR-JDMS).* 13, 68-74. DOI: 10.9790/0853-13156874.

International Journal of Novel Research in Healthcare and Nursing

 Vol. 9, Issue 1, pp: (23-36), Month: January - April 2022, Available at: www.noveltyjournals.com

- [9] **Talegawkar, SA. et al. (2020).** Differences in Diet Quality among Multiple US Racial/Ethnic Groups from the Mediators of Atherosclerosis in South Asians Living in America (MASALA) Study and the Multi-Ethnic Study of Atherosclerosis (MESA). *The Journal of nutrition*, Vol. 150 (6), pp. 1509-1515. DOI:10.1093/in/nxaa050.
- [10] **Talegawkar, SA. et al. (2020).** Adherence to the Australian Dietary Guidelines Is Not Associated with Brain Structure or Cognitive Function in Older Adults. *The Journal of nutrition*, Vol. 150 (6), pp. 1529-1534. DOI:10.1093/in/nxaa050.
- [11] **Rodgers, GP. Collins, FS. (2020).** Precision Nutrition-the Answer to "What to Eat to Stay Healthy". *JAMA*, Vol. 324 (8), pp. 735-736. DOI: 10.1001/jama.2020.13601.
- [12] **Van Horn, L. et al., (2019).** Advancing Nutrition Education, Training, and Research for Medical Students, Residents, Fellows, Attending Physicians, and Other Clinicians: Building Competencies and Interdisciplinary Coordination. *Advances in nutrition* (Bethesda, Md.); Vol. 10 (6), pp. 1181-1200. DOI: 10.1093/advances/nmz083.
- [13] **Wilson, M. (2016).** American Diet Quality: Where It Is, Where It Is Heading, and What It Could Be. *Journal of the Academy of Nutrition and Dietetics*, 11(2). pp.302-310. DOI: <https://doi.org/10.1016/j.jand.2015.09.020>.
- [14] **Payne-Sturges, D. C., Tjaden, A., Caldeira, K. M., Vincent, K. B., &Arria, A. M. (2018).** Student Hunger on Campus: Food Insecurity Among College Students and Implications for Academic Institutions. *American journal of health promotion: AJHP*, 32(2), 349–354. <https://doi.org/10.1177/0890117117719620>.
- [15] **Sotos-Prieto, M. (2017).** Association of Changes in Diet Quality with Total and Cause-Specific Mortality. *Journal of medicine*, 377. pp.143-153. DOI: 10.1056/NEJMoa1613502.
- [16] **Lenoir-Wijnkoop, I. (2013).** Nutrition economics – food as an ally of public health. *British Journal of Nutrition*, Volume 109, Issue 5, pp. 777 – 784. DOI:<https://doi.org/10.1017/S0007114512005107>.
- [17] **Spendlove, J. (2011).** Evaluation of general nutrition knowledge in elite Australian athletes. *British Journal of Nutrition*, Volume 107, Issue 12, pp. 1871 – 1880. DOI: <https://doi.org/10.1017/S0007114511005125>.
- [18] **Spronk, I. (2014).** Relationship between nutrition knowledge and dietary intake. *British Journal of Nutrition*, Volume 111, Issue 10, pp. 1713 – 1726. DOI: <https://doi.org/10.1017/S0007114514000087>.
- [19] **Ohlhorst, S (2013).** Nutrition research to affect food and a healthy life span. *The Journal of Nutrition*, Volume 143, Issue 8, Pages 1349–1354. DOI: <https://doi.org/10.3945/jn.113.180638>.
- [20] **Darmon, N. (2015).** Contribution of food prices and diet cost to socioeconomic disparities in diet quality and health: a systematic review and analysis. *Nutrition Reviews*, Volume 73, Issue 10, Pages 643–660, DOI: <https://doi.org/10.1093/nutrit/nuv027>.