# **ORIGINAL ARTICLE**

# Nutritional Habits of Middle School Students in Al-Nasiriyah City

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## ABSTRACT

Objective(s): The purpose of this study is to ascertain middle school pupils' nutritional habits.

**Methodology:** The investigation began on November 3rd, 2021 and will conclude on March 10th, 2022. The design is crosssectional. The study is being undertaken in the male and female middle schools in Al-Nasiryia City. A random sample of 60 middle school pupils is chosen. Consent forms were signed by all students who volunteered to participate in the study. The study will employ a self-report questionnaire separated into two sections: part I will analyze middle school students' sociodemographic traits, and part II will measure secondary school students' nutritional knowledge. Content validity and internal consistency reliability are determined using a pilot study. A data collection instrument is employed. The data are analyzed using the descriptive statistical data analysis approach, whereas the data are analyzed using the inferential statistical data analysis approach.

**Results:** Results show that the majority of the female and male students have fair dietary habits.(%75.0)

**Conclusion:** The study concluded that nutrition education is an effective strategy for enhancing the dietary habits of middle school students. This study shows that the dietary habits of these students are not affected as they age.

**Recommendations:** The study says that the Ministry of Education should set up nutrition education classes for these students to help them learn more about nutrition-related issues .

Keywords: Nutritional Habits, Middle School Students

# INTRODUCTION

There are two parts to good health: good nutrition and good living. In this case, it's a diet that meets one's energy and nutrient needs for proper body functions. It also meets one's caloric needs well enough to keep one healthy. Thus, it takes into account both the quality and quantity of food that a person eats when it comes to their health (National Nutrition Council, 2017) <sup>(1)</sup>.

Appropriate nutrition is crucial for healthy development and pubertal maturation at each stage of growth (infancy, childhood, and adolescence)  $^{(2)}$ .

A healthy diet and a healthy way of life help children grow up and stay healthy. Nutrition that is adequate and balanced can help people stay healthy, have a better quality of life, and make their kids more healthy and successful in school <sup>(3,4)</sup>.

On the other hand, correcting poor eating and lifestyle choices made during this time period would be challenging. Obesity, cardiovascular disease, diabetes, hypertension, and cancer are all caused by an inadequate and imbalanced diet, which can lead to childhood development problems and diseases <sup>(5)</sup>.

Obesity prevalence has increased in recent years to the point where it is now considered a global epidemic and is treated as an illness, particularly in wealthy countries <sup>(6)</sup>.

Health and nutritional education have been described as an educational measure to induce positive behavioral changes in order to improve people's and private adolescent nutritional status. It is a low-cost, high-effective health technology, and services are available in developed countries to reduce many of the world's most common illnesses. In developing nations <sup>(7)</sup>.

Nutritional education that is both practical and widely recognized and that considers social and economic circumstances, eating habits, and local product supplies may be able to help solve the problem of eating patterns to a considerable extent. Health and nutritional education will provide individuals with adequate information and inspiration to make informed decisions regarding healthy lifestyle choices. Nutritional education is needed to encourage and make sure that people eat foods that have a lot of iron, folic acid, and vitamin C on a regular basis, as well as foods that don't <sup>(7)</sup>.

## METHODOLOGY

The design is carried out cross-sectionally. The study is being conducted in Al-Nasiryia City's male and female middle schools. We selected a random sample of 60 middle school pupils. All

students who accepted to participate in the study signed a consent form.

The study will use a self-reported questionnaire that is divided into two sections: Part I will examine the sociodemographic features of middle school students, and Part II will examine the nutritional habits of middle school students. The content validity is assessed by an expert panel, and the internal consistency reliability is determined using the split-half approach and the Cronbach alpha correlation coefficient in pilot research. The study instrument is used to collect data. The descriptive statistical data analysis approach is used to study the data, whereas the inferential statistical data analysis approach is used to analyze the data.

## **RESULTS OF THE STUDY**

 
 Table 1: Distribution of Middle School Students' Sociodemographic Characteristics

List	Characteristics	Frequency	Percent
1	Age (Years)	20 20 20	33.3 33.3 33.3
	13 14 15	20	55.5
2	Class	20 20 20	33.3 33.3 33.3
	First Class Second Class Third Class		
3	Monthly Income	23 16 8 5 5 3	38.33 26.66 13.33 8.33 8.33 5.0
	300,000 dinar< 300,000-600,000 dinar 601,000-9000,000 dinar 901,000-1,200,000 dinar 1,201,000-1,500,000 dinar > 1,500,000 dinar		

The results of this table indicate that the students in this study are evenly distributed in terms of their age and class as three groups of (20) (33.3%) each. Most of them have an income of less

than (300) thousand dinar and they are accounted as the most (38.33%).

The data in this table indicate that the majority of students have fair nutritional habits (75 %).

Table 2: Overall Evaluation of Middle School Students' Nutritional Habits

Poor	Fair	Good
(44-73.33)	(73.34-102.66)	(102.67-132)
5 (8.33%)	45 (75%)	10 (16.67%)

Table 3: Mean of Scores on Items of Nutritional Habits					
Item	Always	Sometimes	Never	MS	Evaluation
1. I plan my meals to be healthy.	22	31	7	2.25	Moderate
2. I read about nutrition in books.	22	10	14	1.66	Low
3. I read about the nutritious food I eat inmagazines or newspapers.	9	22	29	1.66	Low
4. I study food labels to identify the nutrients in food.	13	23	24	1.81	Moderate
5. I get information about healthy food from TV.	19	29	11	2.1	Moderate
6. I get information about nutrition from the Internet.	29	22	9	2.33	Moderate
7. I read general ads about nutritious foods.	17	23	20	1.95	Moderate
8. I ask my mom about healthy foods.	34	18	8	2.43	High
9. I ask my teacher what healthy food to eat.	12	17	31	1.68	Moderate
10. I study nutrition in school.	10	22	28	1.7	Moderate
11. I talk to my friends about healthy foods to eat.	11	26	23	1.8	Moderate
12. I think if what I am eating is healthy.	31	23	6	2.41	High
13. I eat the same foods every day.	8	33	19	1.81	Moderate
14. I am trying new foods.	40	15	5	2.58	High
15. I eat foods that contain minerals and iron.	28	25	7	2.35	High
16. I eat foods that are good sources of vitamin A, B, C.	42	16	2	2.66	High
17. I eat foods that contain vitamins that contain iron.	31	23	6	2.41	High
18. Wash the fruit before eating it.	53	5	2	2.85	High
19. I make sure the meat I eat is cooked enough.	54	4	2	2.86	High
20. I eat meat, poultry, eggs at every meal.	23	33	4	2.31	Moderate
21. I am thinking if my meals have enough protein.	21	31	8	2.21	Moderate
22. I try to eat and drink calcium-rich food.	27	26	7	2.33	Moderate
23. I choose foods that are low in fat.	23	30	7	2.26	Moderate
24. I put a lot of salt on the food that I eat.	17	28	15	2.03	Moderate
25. I eat high calorie snacks.	20	32	8	2.2	Moderate
26. If I think I've gained too much weight, I eat less sweets.	24	21	15	2.15	Moderate
27. I would choose to eat sweets instead of a piece of fruit.	14	21	25	1.58	Moderate
28. I choose to eat chips and other snacks instead of fruit.	18	20	22	1.93	Moderate
29. I drink coffee with meals.	8	20	32	1.6	Low
30. When I buy a snack, I choose soda instead of soft drinks.	10	24	26	1.73	Moderate
31. I drink soda instead of fruit juices.	9	17	34	1.58	Moderate
32. I make sure the water I drink is clean.	54	3	3	2.85	High
33. I drink eight glasses of water every day.	42	9	9	2.55	High
34. I choose to drink water instead of soda.	43	12	5	158	Low
35. I eat a variety of foods.	44	14	2	2.7	High
36. I suggest my family to buy healthy food	30	18	12	2.3	Moderate
37. Ask other adults questions about healthy eating.	22	26	12	2.16	Moderate
38. I eat fruits.	44	14	2	2.7	High
39. I eat green vegetables.	32	23	5	2.45	High
40. I eat other vegetables.	32	22	6	2.43	High
41. I eat foods that I know are good for me even if I do not like them.	22	22	16	2.1	Moderate
42. l drink milk.	32	19	9	2.38	High
43. I eat sweets.	28	27	5	2.38	High
44 Leat cereal bread or tortillas	6	18	6	25	High

Low: Mean of Scores = 1-1.66, Moderate: Mean of Scores =1.67- 2.33, High: Mean of Scores = 2.34-3

Results from this table indicate that the mean score on items of students' nutritional habits is high on (17) items, moderate on (23) items and low on (4) items of dietary habits.

#### DISCUSSION

Part I: Discussion of Middle School Students' Sociodemographic Characteristics: According to the examination of such characteristics, the majority of pupils in the current survey are similarly distributed relative to their age and grade in order to be compared throughout the study (Table 1).

The results of this table indicate that the students in the current study are evenly distributed by age and class into six groups of twenty (16.7%) each. Most of them have an income of less than 300 thousand dinars, and they are accounted for the most (30%).

The majority of their parents are low-income and live in cities (Table 1). This data demonstrates that these pupils shared a lack of dietary awareness as a result of the early identified variables' impact.

Another study was done. Students in high school are asked how common it is for them to not eat breakfast, how it relates to their nutritional status and socio-demographic characteristics, and if there is a link with other unhealthy eating habits. This is how it worked: A random sample of 513 high school students was chosen from three areas: urban/higher, medium, and low-income. There was a lot of snobbery about breakfast. People who skipped breakfast were more likely to be older teenagers, those whose fathers had low educational levels, and those who lived in cities or low-income areas <sup>(8)</sup>.

Another study is done to find out how certain socio-economic factors affect elementary school kids' knowledge of nutrition. The stratified cluster sampling method is used to get a sample of 39222 students from multiple stages. In the study, students with the least-educated parents had the lowest scores on nutrition awareness tests, which is why <sup>(9)</sup>.

Part II: Discussing the General Assessment of Knowledge of the Nutritional Habits of Middle School Students :During the analysis of the data, it was shown that these students are at a fair level of knowledge of nutritional habits (Table 2). This result indicates that these students are directed and aware of their own nutrition which is very evident in the pilot episode and this level of nutritional knowledge appears in a fair level of scores on the elements of nutritional knowledge aspects of knowledge about nutrition and knowledge of diet and the elements needed by the knowledge about vegetarianism, micro and bodv and macronutrients, knowledge of the benefits of healthy nutrition, knowledge of nutrition-related diseases, nutritional problems, balanced diet, and prevention of nutritional diseases. These results reveal that these students had an average ability to know nutritional habits. Such findings are evidenced in the moderate mean of scores on items of such phenomenon of interest (Table 3).

This study of the dietary habits of adolescents is necessary because changes in the body affect the nutritional and nutritional requirements of an individual. Adolescents become increasingly self-reliant and make many of their food choices themselves <sup>(10)</sup>.

Another study found that adolescents experience a rapid period of growth and development, during which their nutritional and micronutrient requirements are quite high. While the prevalence of malnutrition among adolescents is decreasing, the current rate of malnutrition is still quite high (41.9 percent). Adolescents who understand nutrition well are more likely to eat healthily  $^{(11)}.$ 

The purpose of this descriptive study is to improve high school seniors' comprehension of dietary knowledge. The study's

findings corroborate the notion that high school seniors lack adequate dietary understanding  $^{\left( 12\right) }.$ 

Not only is food the most basic human need, but proper nutrition is also critical for development. Teenagers require a balanced diet and adequate physical activity in order to maintain muscle growth and bone strength. The purpose of this study is to ascertain high school students' dietary habits.

#### CONCLUSION

The study suggests that nutrition education is an effective strategy for promoting middle school children's eating habits. This study shows that the dietary habits of these students do not change as they age.

**Recommendations** :The Ministry of Education could establish nutrition education classes to help these students gain a better understanding and awareness of nutrition-related issues.

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