

**"FOOD CHOICE MOTIVES, HEALTH & NUTRITION KNOWLEDGE
AMONG USERS OF ONLINE FOOD DELIVERY APPS"**



PROJECT SUBMITTED

In Partial Fulfilment of the Requirement for the Award of the degree of

B.Sc NUTRITION AND DIETETICS

BY

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(Register no:SB20ND014)

DEPARTMENT OF CLINICAL NUTRITION AND DIETETICS

ST. TERESA'S COLLEGE (AUTONOMOUS)

ERNAKULAM

APRIL 2023

CERTIFIED AS BONAFIDE RESEARCH WORK

Signature of Internal Examiner

Signature of External Examiner

DECLARATION

I hereby declare that the project entitled "**FOOD CHOICE MOTIVES HEALTH AND NUTRITION KNOWLEDGE AMONG USERS OF ONLINE FOOD DELIVERY APPS**" submitted in partial fulfilment of the requirement for the award of the degree of B.Sc Nutrition and Dietetics is a record of original research work done by me under the supervision and guidance of **Ms. DIVYA RAICHU JACOB**, Assistant Professor, Department of Clinical Nutrition and Dietetics, Women's Study Centre, St. Teresa's College (Autonomous), Ernakulam and has not been submitted in part or full of any other degree/diploma/fellowship or the similar titles to any candidate of any other university.

Place:

MOLUTTY M S

Date:

CERTIFICATE

I here certify that the project entitled **"FOOD CHOICE MOTIVES, AND NUTRITION KNOWLEDGE AMONG USERS OF ONLINE FOOD DELIVERY APPS"** submitted in partial fulfilment of the requirement for the award of the degree of B.Sc Nutrition and Dietetics is a record of original work done by Ms. SHAIMA R.F during the period of the study under my guidance and supervision.

Signature of the HOD

Signature of the Research Guide with designation

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CHAPTER-I

INTRODUCTION

Online food delivery (**OFD**) apps can be defined as mobile apps that smartphone users download and use as an innovative and convenient channel to access restaurants, view food menus, place food orders, and make payments without any physical interaction with restaurant staff. In contrast to the conventional food delivery service platforms where consumers make a reservation in advance, the modern delivery service platforms provide service immediately upon receiving the order (Vinaik et al., 2019).

The importance of nine food choice motives was assessed: health, convenience, sensory appeal, natural content, ethical concern, weight control, mood, familiarity, and price. According to the study done by Taufique & Vaithianathan (2018) and Chakrabarti (2010), these were the food choice motives behind selecting OFDs.

Relevance of study

This study is basically based on the importance of food delivery apps in this generation. As technology improved day by day drastically it become very comfort to the people to fullfil their needs.

Customers can order food from their favourite restaurant, choose their dishes, choose whether to order from their comfort zone. Recent researches have found that the customers often make poor food choices while selecting the food. This study aimed to understand the food choice motives, health and nutrition knowledge among the users of OFDs.

CHAPTER- II

REVIEW OF LITERATURE

A literature search was done to identify the food choice motives, health and nutrition knowledge among users of online food delivery apps. It is given under the following headings.

a) Consumers Perceptions of Healthy Food Availability in Online Food Delivery Applications

According to Miroso et al. (2020), the use of OFD service is becoming more prominent among the young adults, especially university students. A survey in 2019 on 1000 university students revealed that at least 71.5% of them had used OFD for at least 2 years and that 85.1% of them used OFD more than once a week. Studies have shown university students tend to adopt unhealthy eating practices and they are prone to poor nutritional status. Many college and university students have difficulty in following healthy eating habits.

b) Food choice motives, attitude towards and intention to adopt personalised nutrition

Rankin et al. (2018) explored associations between food choice motives, attitudes towards and intention to adopt personalized nutrition, to inform communication strategies based on consumer priorities and concerns. A survey was conducted online which included the Food Choice Questionnaire (FCQ) for assessing the adaptation of personalized nutrition. Personalized nutrition food choices like 'weight control', 'mood', 'health' and 'ethical concern' had a positive association but price and sensory appeal was had negative association and directly associated with intention to adopt personalised nutrition.

c) Online Food Ordering Practices

Fatima et al. (2019) found that the popularity of food delivery apps have increased. Mostly those who spend money while ordering food are obese. According to the study, 16.75 percent of them were underweight, 14.72 percent were overweight and 17.76 percent were obese. It was noted that majority of the subjects (34 %) preferred fast foods.

d) Nutritional quality and consumer health perception of online delivery food

Dai et al. (2022) showed that the rapid growth of technology enabled the food convenience. However, it is important to investigate or enquire about public's awareness of the nutritional quality of food through OFD and their knowledge of dietary nutrition. Generally, the nutritional quality of OFD foods are low. The nutritional quality of foods was negatively correlated with their popularity among consumers. Young OFD consumers generally do not pay attention to the nutritional quality of foods while choosing the foods. Regular customers of OFDs are mostly unhealthy because of increased blood lipids, weight gain, gastrointestinal discomfort. The reasons they found were because of excessive oil, salt, and sugar in the food, while ignoring the balance between different types of food.

CHAPTER- III

METHODOLOGY

The methodology adopted for the study titled “Food choice motives and health and nutrition knowledge among the users of online food delivery apps” is given in this chapter.

Aim of the study

To determine the food choice motives and health and nutrition knowledge among the users of online food delivery apps.

Objectives of the study

1. To determine the frequency of usage of OFD apps among study participants between 18 and 30 years.
2. To determine the food choice motives in choosing OFD apps.
3. To identify the most influencing factor behind the usage of OFD apps.
4. To study health and nutrition knowledge among users of OFD apps.

Research design

The research design involved in the study is descriptive in nature. Descriptive study design allows the researcher to study and describe the distribution of one or more variables, without regard to any causal or other hypotheses. A descriptive study may also try to generalise the findings from a representative sample to a larger target population as in a cross-sectional survey. This study design involves the collection of information on the presence or level of one or more variables of interest (health-related characteristic), whether exposure or outcome as they exist in a defined population at one particular time. If these data are analyzed only to determine the distribution of one or more variables, these are descriptive (Omair, 2015).

Sampling Design

Convenience sampling is a non-probability sampling method where units are selected for inclusion in the sample because they are the easiest for the researcher to access. It is a research sampling strategy that involves selecting participants based on their accessibility and availability to the researcher. It can be a cost-effective and time-efficient method of data collection (Sedgwick, (2013).

Selection of samples and number of study participants

The study participants included in the study were young adults in the age group between 18 and 30 years. According to a study done by Vinaik et al. (2019), the usage of online food delivery apps are more common among young adults. The number of study participants who participated in the study were 111.

CHAPTER- IV
RESULTS AND DISCUSSION

The results and discussion for the study titled “Food choice motives and health and nutrition knowledge among the users of online food delivery apps” is given in this chapter.

The results of the study are discussed in the following sections.

1. Number of study participants

Table no. 1 shows the genderwise distribution of study participants in the study.

Table no.1
Percentage of males and females in the study

Particulars	MALES	FEMALES
Number of study participants	31	80
Percentage	27.9 %	72.1%

The participants in the survey are mostly females than males.

2. Anthropometric measurements

Table no. 2 shows the average mean and standard deviation of height and weight of the study participants in the survey.

Table no.2
Average height and weight of males and females in the study

Particulars	Average height	Average weight
Males	161	65
Females	155	59

From table no. 2, it is evident that higher average height and weight is for males.

3. Frequency of usage of OFDs

Table no. 3 shows the frequency of usage of food delivery apps among the study participants.

Table no.3

Frequency of usage of food delivery apps among the study participants

Particulars	Never	Once in three months	Once or twice a month	Once a week	Thrice a week	Every day
No. of study participants	13	26	40	18	12	2
Percentage	11.7%	23.4%	36%	16.2%	10.8%	1.9%

From table no. 3, it is evident that higher percent of study participants ordered food online only once or twice a month. Only few participants ordered food online on a daily basis.

4. Health and nutrition knowledge

According to a study done by Fatima & Rao (2018), the nutritional value of foods are neglected while choosing to order from food delivery apps. Table no. 4 shows the preference of nutritious foods among the users of OFD apps.

Table no.4

Preference of nutritious foods among the study participants

	Yes	No	Sometimes
No. of study participants	20	33	58
Percentage	18%	29.7%	52.3%

Table no. 4 showed that majority of the study participants (52.3%) rarely preferred nutritious foods while choosing from OFDs. A lower per cent of 18% did not prefer nutritious foods at all.

5. Types of foods ordered

According to Fatima & Rao (2019), poor food choices among users of online food delivery apps have resulted in a general decline in health. Table no. 5 represents the food preferences of study participants.

Table no.5
Food preferences of study participants

Particulars	Rice meals	Desserts	Pizzas, Hamburgers	Fried foods	Salads	Snacks
No. of study participants	51	39	72	51	17	28
Percentage	45.9%	35.1%	64.9%	45.9%	15.3%	25.2%

It is evident from table no. 5 that majority of the study participants preferred junk foods like pizzas, hamburgers, fried foods. This is an evidence of poor dietary choice among OFD app users.

6. Quality of food

It is important to know the customer's knowledge about the quality of delivered food. Figure no.1 shows the customer's knowledge on whether they are getting the best quality food or not.

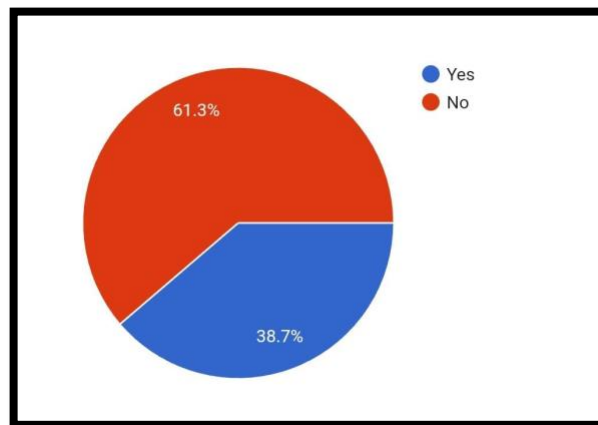


Fig. 1: Customer's knowledge on whether they are getting the best quality food or not

As evident from figure 1, majority of the study participants believe that they get best quality of food on delivery.

7. Content of food ordered

Figure no. 2 shows the customer’s knowledge on the content of food ordered through food delivery apps.

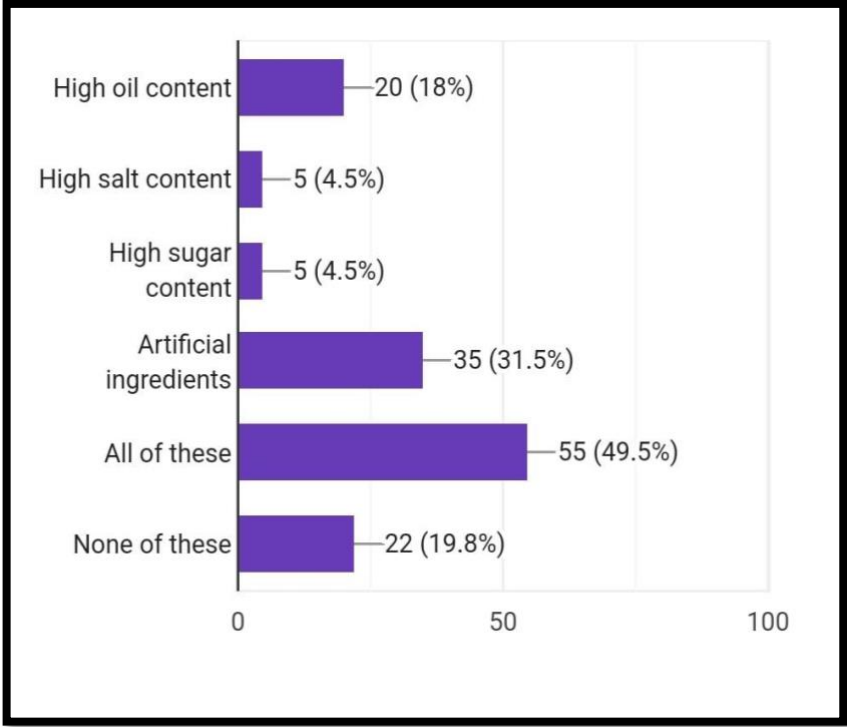


Fig. 2: Customer’s knowledge on the content of food ordered through food delivery apps.

From figure 2, it was found that higher percent of study participants who ordered food online know that their food is high in oil, salt, sugar content and artificial ingredients (49.5%). Around 31.5 % of the study participants observed that their foods are rich in artificial ingredients.

8. Changes in body

Figure 3 shows the long term changes in health caused by daily consumption of foods ordered through food delivery apps.

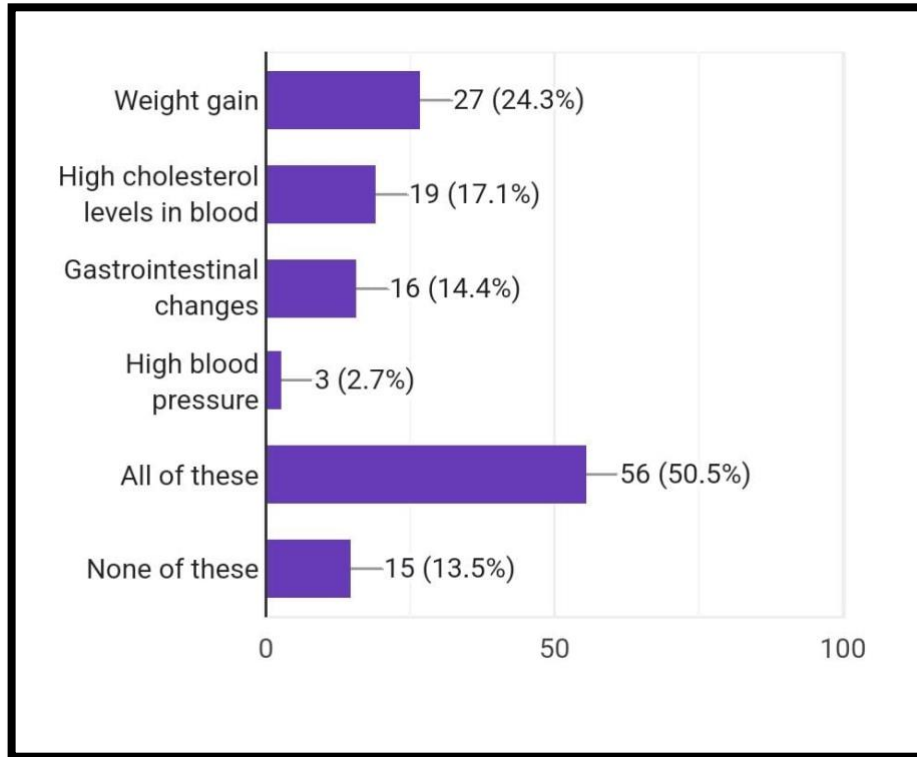


Fig. 3: Customer's knowledge on the long term health changes

From this graph, it is evident that majority of study participants (50.5%) ordered food online knowing that the ordered foods will cause changes in health like weight gain, high cholesterol, blood pressure and gastrointestinal changes.

9. Preference of quality over taste

Figure 4 shows the preference of the customer (quality over taste) while ordering food online.

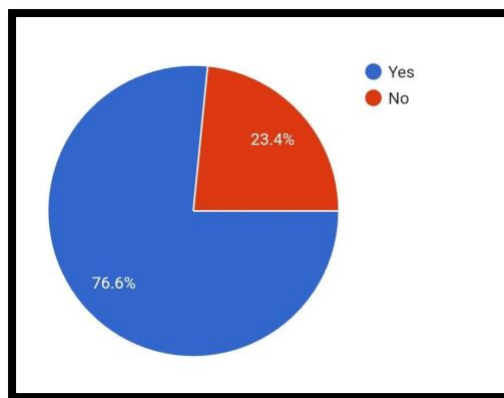


Fig. 4: Customer's preference of quality over taste

It is evident from figure 4 that majority of the study participants preferred quality over taste while ordering food online.

10. Ordering online or eating out

Figure 5 shows whether the participants prefer eating out or ordering online.

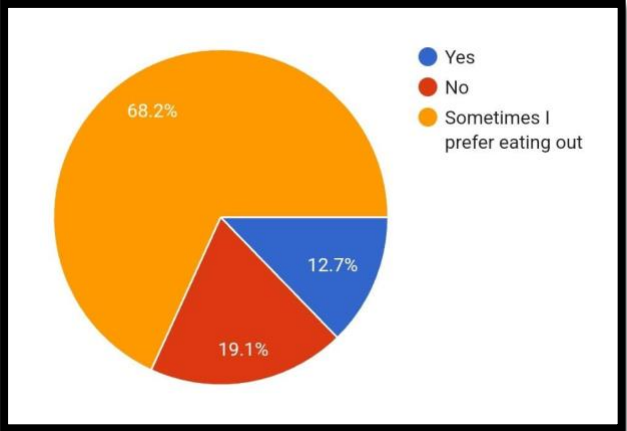


Fig. 4: Customer’s preference of quality over taste

It is evident from figure 5 that majority of the study participants sometimes prefer eating out than ordering food online. Sometimes, they do prefer ordering online (19.1%).

CHAPTER-V

SUMMARY AND CONCLUSION

The study findings are as follows:

- The study participants were aged between 18 and 30 years. This study was focused on the frequency of usage of OFDs, their health and nutritional knowledge.
- The number of study participants, who participated in the study are about 31 (27.9%) males and 80 (72.1%) females.
- The average height and weight of males was 161 cm and 65 kg and the average height and weight of females was 155 cm and 59 kg respectively.
- The frequency of usage of food delivery apps among the study participants shows 36% of study participants are only using OFD once in a month (i.e, 40 number of people). It is evident that a higher percentage of study participants ordered food online only once or twice a month. Only a few participants ordered food online on a daily basis.
- The nutritional value of foods are neglected while choosing to order from food delivery apps. The study shows the majority of people do not always consider nutritious food while ordering (52.3%).
- Poor food choices among users of online food delivery apps have resulted in a general decline in health. It represents the food preferences of study participants. It is evident from the study that the majority of the study participants preferred junk foods like pizzas, hamburgers, and fried foods. This is evidence of poor dietary choice among OFD app users.
- It is important to know the customer's knowledge about the quality of delivered food. But here the study shows that most of the participants believe that they are getting best quality food from OFD.
- The study was found that higher percent of study participants who ordered food online know that their food is high in oil, salt, sugar content and artificial ingredients (49.5%). Around 31.5 % of the study participants observed that their foods are rich in artificial ingredients.
- In this study, it is evident that majority of study participants (50.5%) ordered food online knowing that the ordered foods will cause changes in health like weight gain, high cholesterol, blood pressure and gastrointestinal changes.

- It is evident from the study that majority of the study participants preferred quality over taste while ordering food online.
- Most of the study participants sometimes prefer eating out than ordering food online. They do prefer ordering online as well (19.1%).

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APPENDIX

Questionnaire

1. Do you order food from online food delivery (OFD) apps?

- Yes
- No

2. How regular do you order food from OFD apps?

- Everyday
- Thrice a week
- Once a week
- Once or twice a month
- Once in three months
- Never

2. What are your reasons for ordering from OFD apps? Please click on the following options.

- It takes less/no time to prepare
- It can be delivered to the place where I study/stay.
- Online food delivery apps give good value for money.
- I feel that food items presented in OFDs looks nice, will taste good and will make me feel good if I buy it.
- Food advertised in the media influences me to buy it.
- I am influenced by my friends/family to buy particular foods from OFDs.
- I order foods online because I know what best to eat as I have good nutritional knowledge.

3. Do you consider choosing nutritious foods while ordering from OFDs?

- Yes
- No

- Sometimes

5. What kind of foods do you feel like ordering?

- Rice meals
- Desserts
- Pizzas, hamburgers
- Fried foods
- Salads
- Snacks

6. Do you believe that foods from delivery apps will provide you the best quality food?

- Yes
- No

7. If no, do you think that these foods contain

- High oil content
- High salt content
- High sugar content
- Artificial ingredients
- All of these
- None of these

8. Do you think that food from OFDs will have any of these health changes?

- Weight gain
- High cholesterol levels in blood
- Gastrointestinal changes
- High blood pressure
- All of these
- None of these

9. Do you prefer quality over taste?

➤ Yes

➤ No

10. Do you prefer ordering food to your place of stay rather than eating out?

➤ Yes

➤ No

➤ Sometimes I prefer eating out