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International Journal For Research in  
Applied Science and Engineering Technology



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# **INTERNATIONAL JOURNAL FOR RESEARCH**

IN APPLIED SCIENCE & ENGINEERING TECHNOLOGY

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**Volume: 6      Issue: VII      Month of publication: July 2018**

**DOI: <http://doi.org/10.22214/ijraset.2018.7086>**

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# An Awareness Survey on Portion Size Conducted among Adolescent Girls (16-19 Yrs)

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**Abstract:** It can be hard to measure out every portion of food you eat. Yet there are some simple ways to know that you are eating the right serving sizes. Portion sizes can be defined as the amount of food you choose to eat during a single eating occasion. While a serving is a standardized measurement of food or drink or the amount of each food that you are supposed to eat during a meal. The aim of the study was to know the knowledge of girls about portion sizes and dietary habits. The study was conducted using questionnaire method which consist of general dietary information among the adolescent girls of Anwar ul Uloom college, New Mallepally, Hyderabad. They were given an awareness programme using information and altercative chart. The survey gives us a picture regarding the nutritional status and knowledge of portion sizes among the adolescent girls. Out of 75 girls it was found that 61% have a habit of skipping meals while 39% of them do not skip a meal. An put 43% of girls drink 4 to 5 glasses of water in a day and 29% of them consume more than 7 glasses of water in a day. It was found that, about 67% of girls do not consume junk food on regular basis were as 33% of girls have a habit of consuming junk food from the survey it was found that 59.7% of girls was unaware of portion sizes were as 42.6% have some idea regarding portion sizes of the food. It was concluded that the adolescent girls have knowledge about portion sizes of food.

**Keywords:** Serving sizes, Dietary Habits, Nutritional Status, Skipping of Meal, Junk Food

## I. INTRODUCTION

### A. Portion Size

It can be hard to measure out every portion of food you eat. Yet there are some simple ways to know that you are eating the right serving sizes. A recommended serving size is the amount of each food that you are supposed to eat during a meal or snack. A portion is the amount of food that you actually eat. If you eat more or less than the recommended serving size, you may get either too much or too little of the nutrients you need.

For foods like cereal and pasta, it may be helpful to use measuring cups to measure out an exact serving for a couple of days until you get more practiced at eyeballing the appropriate portion.

1) Use your hand and other everyday objects to measure portion sizes:

a) Fist (one) = 1 cup = rice, pasta, fruits, vegetables.

b) Palm size = 50 grams = meat, fish, poultry.

c) Hand full = 5 grams = Nuts, raisins

d) Two hand full = 10 grams = chips, popcorn.

e) Thumb = 1 tbsp = peanut butter, hard cheese

f) Thumb tip = 1 tsp = cooking oil, mayo, butter, sugar.

You should eat five or more servings of fruits and vegetables each day to help reduce your risk of cancer and other diseases. Fruits and vegetables are low in fat and high in fiber. They will also help you fill up so that you are satisfied at the end of your meals. They do contain calories so you should not eat an unlimited amount, especially of fruits.

2) How to measure out the correct serving sizes of fruits and vegetables:

a) One cup (90 grams) of chopped raw fruits or vegetables is a woman's fist or a baseball

b) One medium apple or orange is a tennis ball

c) One-quarter cup (35 grams) of dried fruit or nuts is a golf ball or small handful

d) One cup (30 grams) of lettuce is four leaves (Romaine lettuce)

e) One medium baked potato is a computer mouse



3) To control your portion sizes when you are eating at home, try the following tips:

- a) DO NOT eat from the bag. You could be tempted to eat too much. Use the serving size on the package to portion out the snack into small bags or bowls. You can also buy single-serving portions of your favourite snack foods. If you buy in bulk, you can divide snacks up into single-serving portions when you get home from the store.
- b) Serve food on smaller plates. Eat from a salad plate instead of a dinner plate. Keep serving dishes on the kitchen counter so you will have to get up for seconds. Putting your food out of easy reach and out of sight will make it harder for you to overeat.
- c) Half of your plate should contain green vegetables. Divide the other half between lean protein and whole grains. Filling half of your plate with green vegetables before you serve the rest of your entrée is one of the easiest methods of portion control.
- d) Substitute lower-fat varieties of food. Instead of whole-fat cream cheese, sour cream, and milk, buy low-fat or skim instead. Use half the amount you would normally use of to save even more calories. You can try replacing half of the cream cheese with hummus or mix the sour cream with plain yogurt to make this easier
- e) DO NOT eat mindlessly. When you snack in front of the television or while doing other activities, you will be distracted enough that you may eat too much. Eat at the table. Focus your attention on your food so you will know when you have had enough to eat.
- f) Snack between meals if desired. If you are hungry between meals, eat a healthy, high-fiber snack such as a piece of fruit, small salad, or bowl of broth-based soup. The snack will fill you up so that you do not eat too much at your next meal. Snacks that pair protein and carbohydrates with fiber will leave you more satisfied. Some examples are having an apple with string cheese, whole-wheat crackers with peanut butter, or baby carrots with hummus.

- 4) To control your portion sizes when eating out, try these tips:
- a) Order the small size. Instead of a medium or large, ask for the smallest size. By eating a small hamburger instead of a large, you will save about 150 calories. A small order of fries will save you about 300 calories, and a small soda will save 150 calories. Never super-size your order.
  - b) Order the "lunch size" of a food, rather than the dinner size.
  - c) Order appetizers rather than entrees.
  - d) Share your meal. Split an entree with a friend, or cut your meal in half when it arrives. Put one half in a to-go box before you start eating. You can have the rest of your meal for lunch the next day.
  - e) Fill up with lower calorie foods. Order a small salad, fruit cup, or cup of broth-based soup before your entree. It will fill you up so that you eat less of your meal.]

Balanced diet for adolescent girl . (number of portions)

Food groups	g / portion	Age group ( 16 – 18)
Cereals and millets	30	11
pulses	30	2.5
Milk (ml) and milk products	100	5
Roots and tubers	100	2
Green leafy vegetables	100	1
Other vegetables	100	2
Fruits	100	1
Sugar	5	5
Fat / oil (visible)	5	7

### Portion Sizes and Menu Plan

#### Portion Size of Foods (raw) and Nutrients

	g/Portion	Energy (Kcal)	Protein (g)	Carbohydrate (g)	Fat (g)
<b>Cereals &amp; millets</b>	30	100	3.0	20	0.8
<b>Pulses</b>	30	100	6.0	15	0.7
<b>Egg</b>	50	85	7.0	-	7.0
<b>Meat/chicken/ fish</b>	50	100	9.0	-	7.0
<b>Milk (ml) &amp; milk products</b>	100	70	3.0	5	3.0
<b>Roots &amp; Tubers</b>	100	80	1.3	18	-
<b>Green leafy vegetables</b>	100	46	3.6	-	0.4
<b>Other vegetables</b>	100	28	1.7	-	0.2
<b>Fruits</b>	100	40	-	10	-
<b>Sugar</b>	5	20	-	5	-
<b>Fat &amp; Oils (visible)</b>	5	45	-	-	5.0

The balanced diets are given as multiples of these portion sizes  
 @ Toned milk.

## II. METHODOLOGY

### A. Sample Size And Place Of Survey

- 1) Methodology is the systematic, theoretical analysis of the method or steps applied to a field of study.
- 2) The sample size consists of 75 students to conduct the awareness survey.
- 3) Adolescent girls were taken as a target group on which survey was conducted.
- 4) The survey was conducted at the Anwar-ul-uloom college new Mallepally Hyderabad.

### B. Tools And Technique

The tools and techniques used to carry out the survey were:

- 1) Questionnaire
- 2) Chart

The method of data collection using a questionnaire is quite popular particularly in the case of big enquiries. It is of set series of questions to be answered by the respondent. Questionnaire has an advantage over some other type of surveys, it is an easy way to approach.

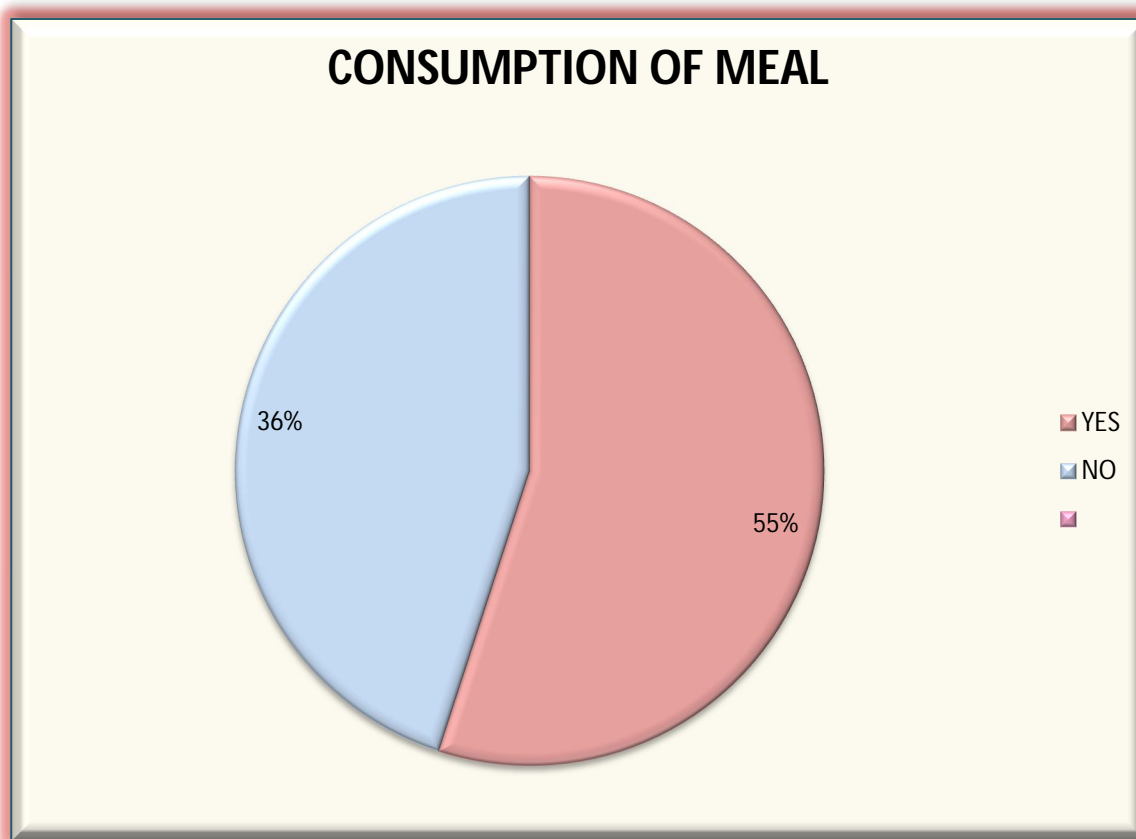
The questionnaire prepared was divided into two parts, the first part being the general information and second part had the dietary information questions.

The second method used was chart which consists of information about portion sizes. It shows that how hands can be used to measure the ingredients at the homes on regular basis. It was very attractive, and helps to conduct the survey in appropriate manner.

### C. Target Group

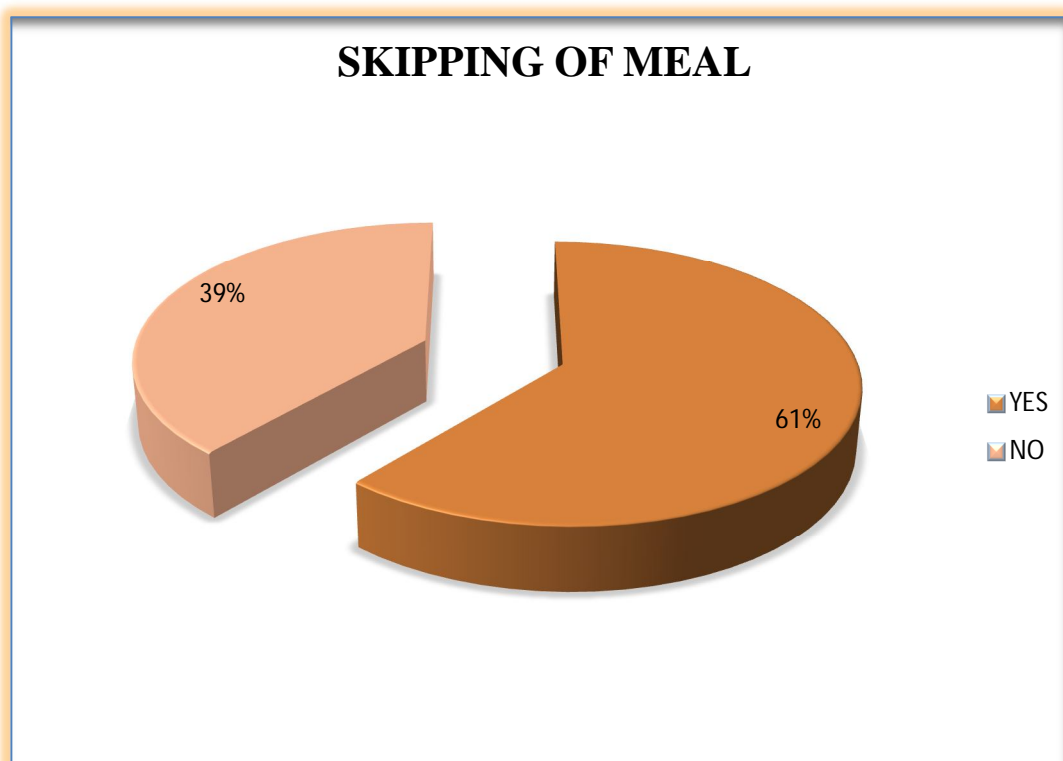
The adolescent girls of college were chosen as the target group to conduct the survey.

#### 1) Report



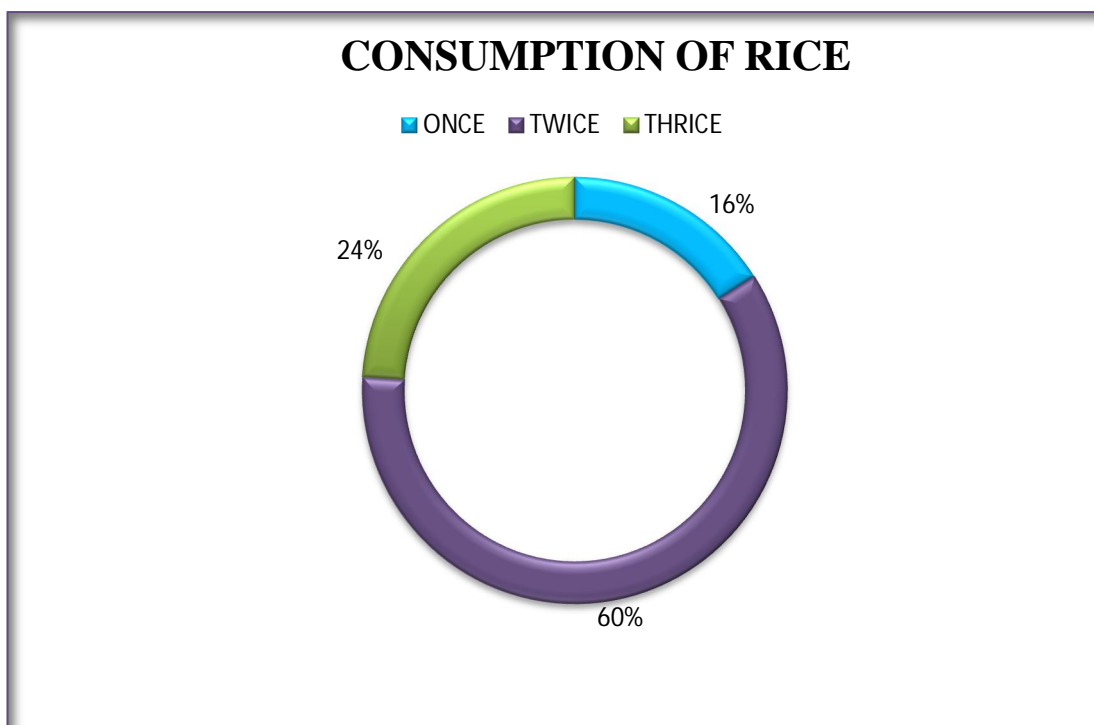
Out of 75 Adolescent girls 56% of girls consume meal thrice daily whereas 36% girls consume meal twice in a day and 8% of them consume food only one time in a day.

2)



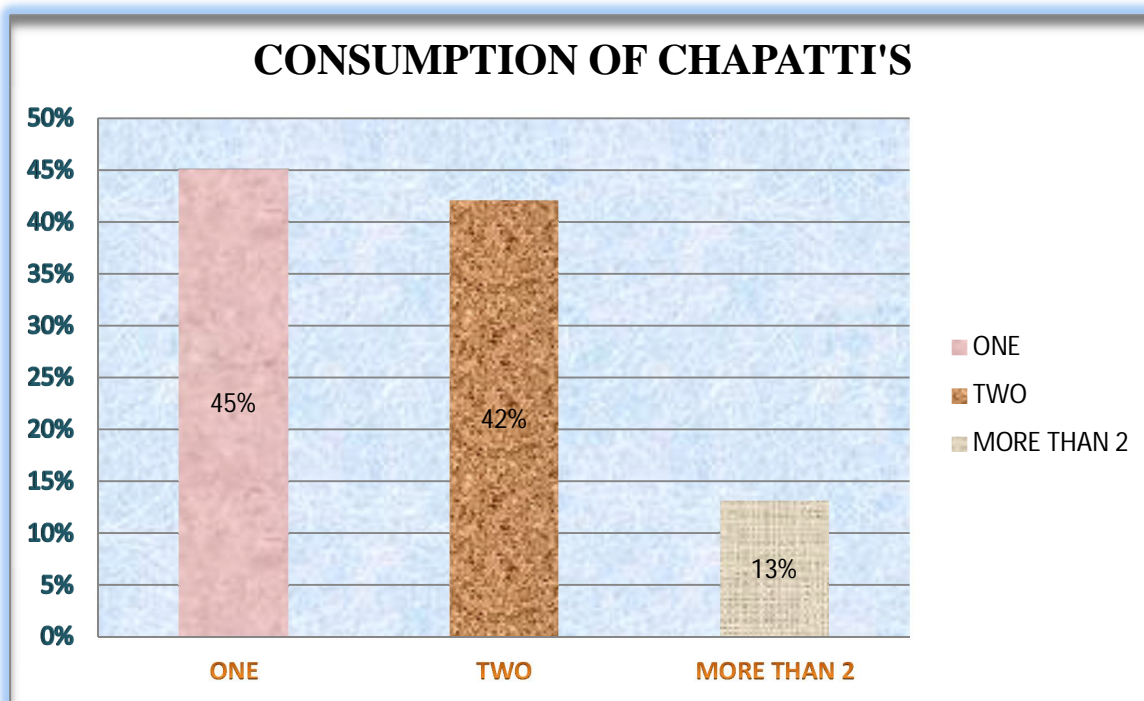
Out of 75 girls it was found that 61% of girls have a habit of skipping a meal while 39% of them do not skip a meal.

3)



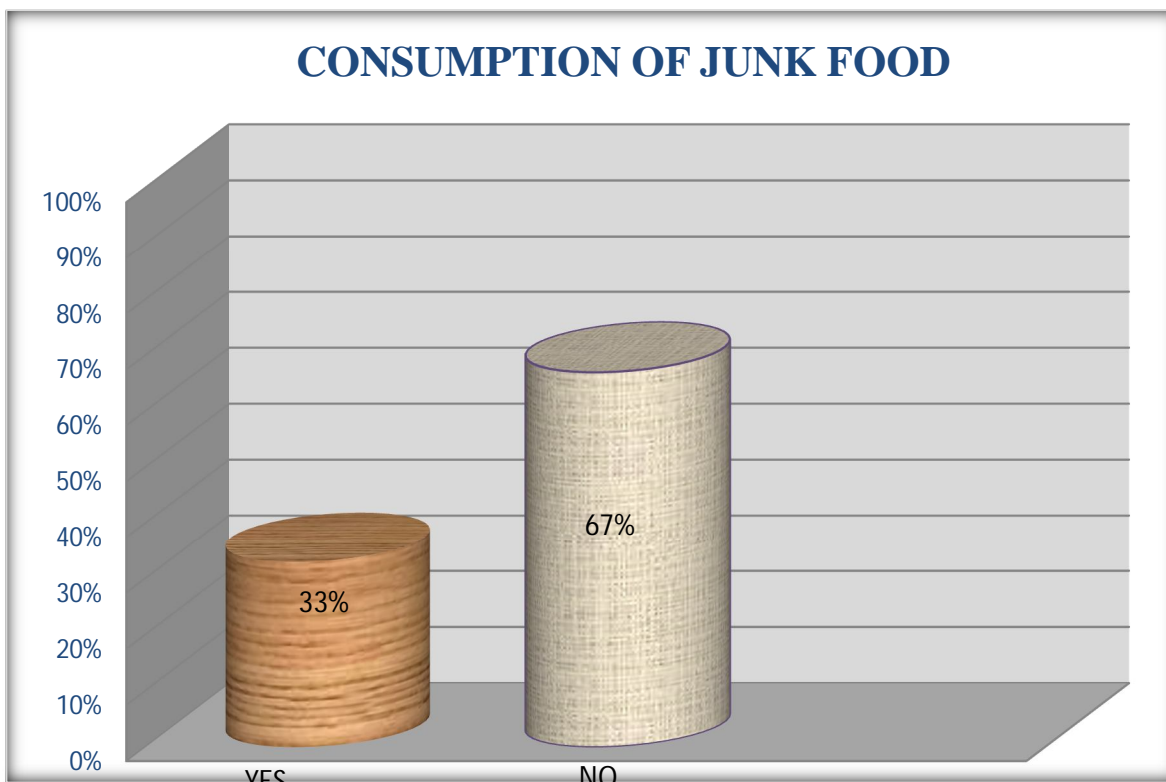
It was found that 60% of girls consume rice twice in a day whereas 24% consume rice two times in a day and the rest 16% of girls consume rice once in a day.

4)



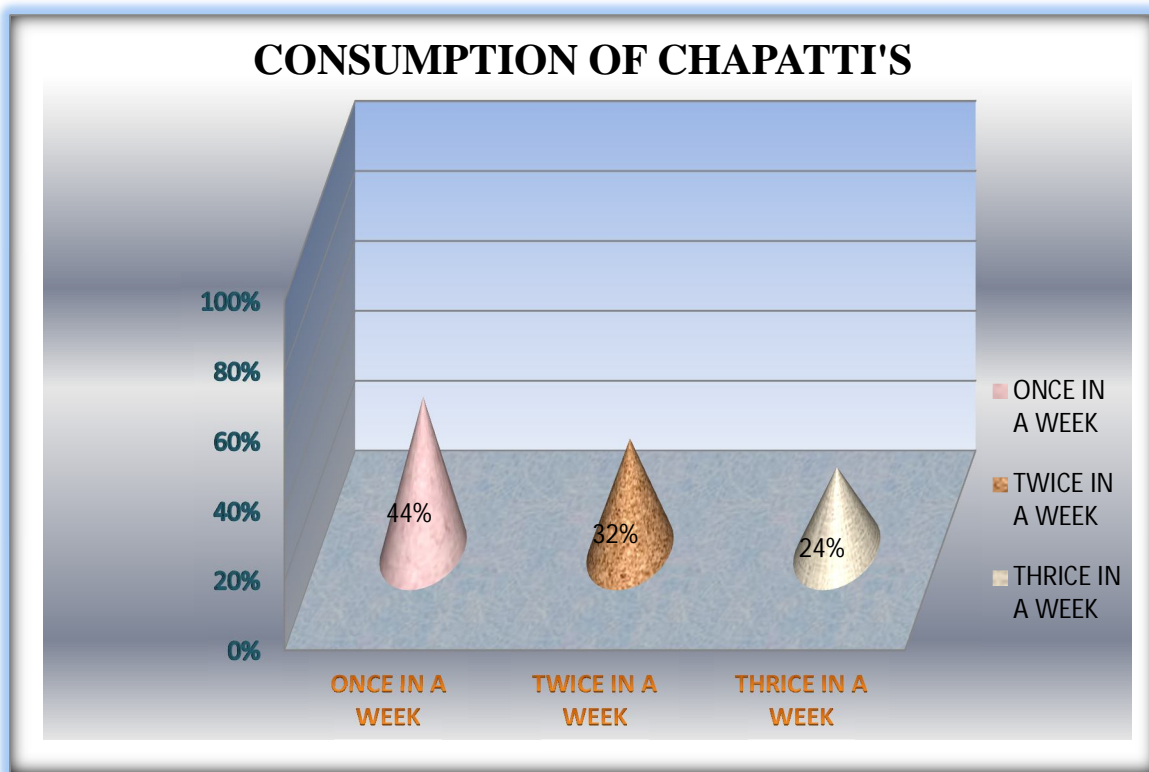
45% of girls like to have 2 chapatti's in a day and 42% of them consume 1 chapatti a day while the rest 13% of them consume more than 2 chapatti's in a day.

5)



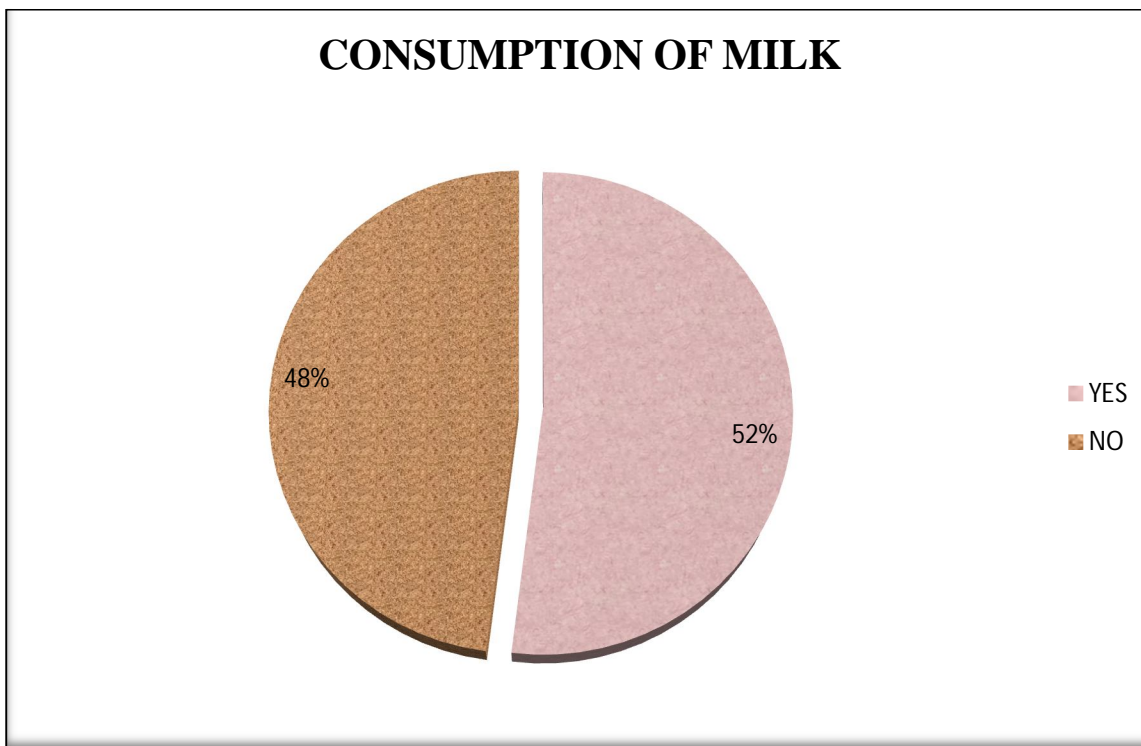
Out of 75 girls it was found that about 67% of them do not consume junk food on a regular basis where as 33% of girls have a habit of consuming junk food on a regular basis.

6)



It was found that 44% of girls consume green leafy vegetables once in a week whereas 32% of girls consume green leafy vegetable two times in a week and only 24% of girls consume green leafy vegetables three time in a week.

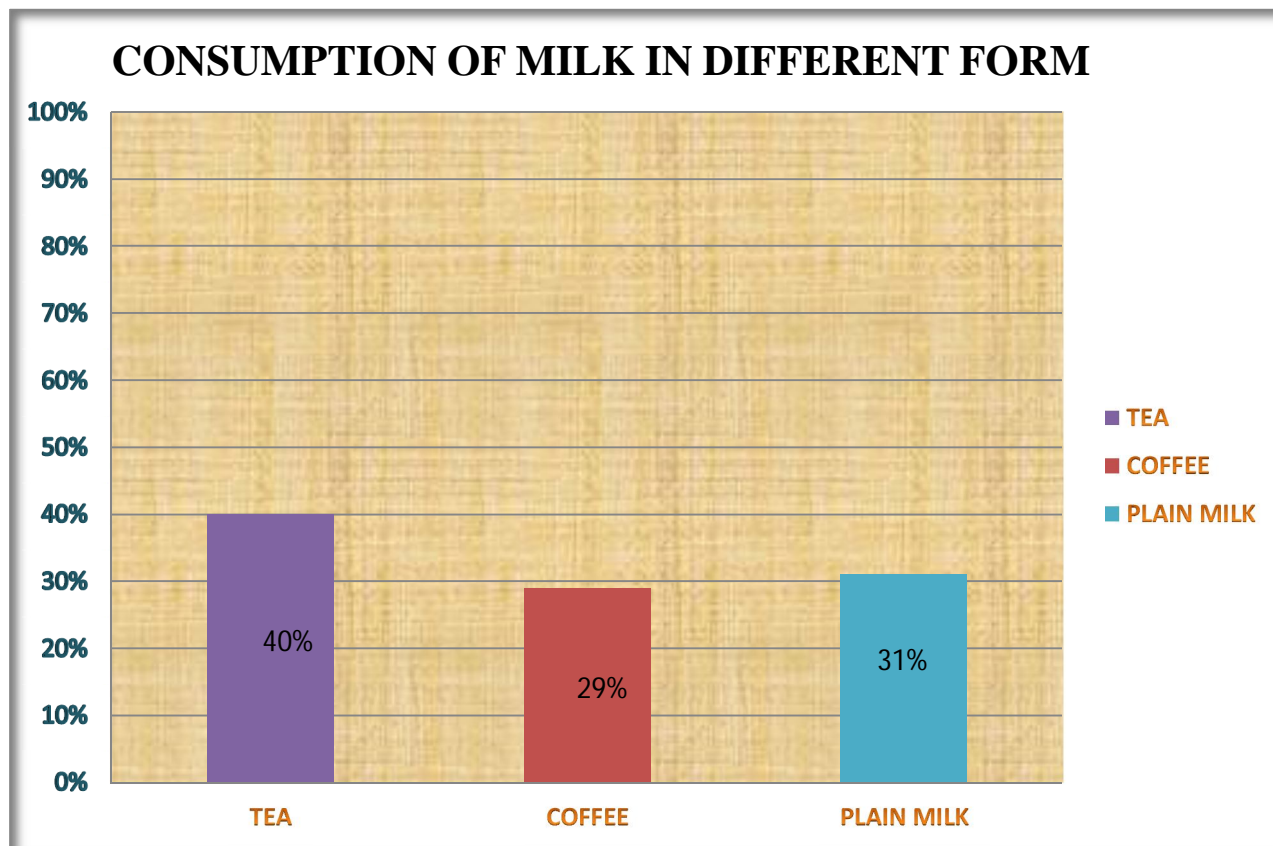
7)



Out of 75 girls about 52% of girls have a habit of consuming milk daily whereas 48% of girls do not consume milk daily.

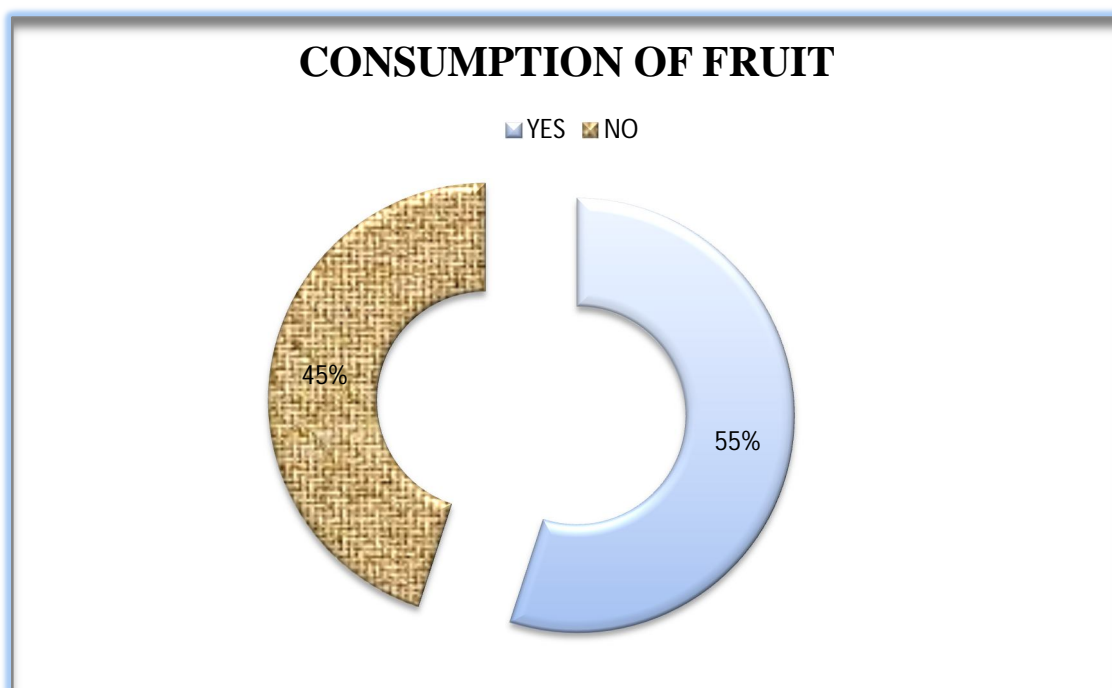


8)



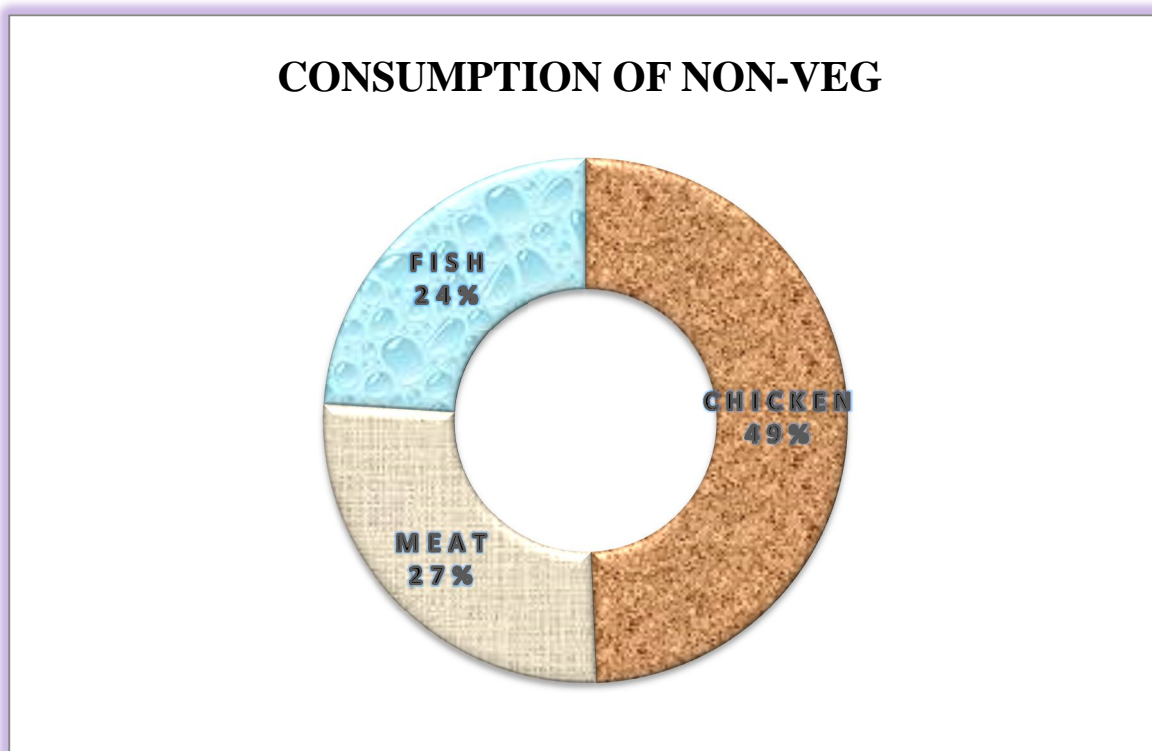
About 40% of girls consume milk in the form of tea whereas 29% would like to consume coffee and only about 31% girls consume plain milk.

9)



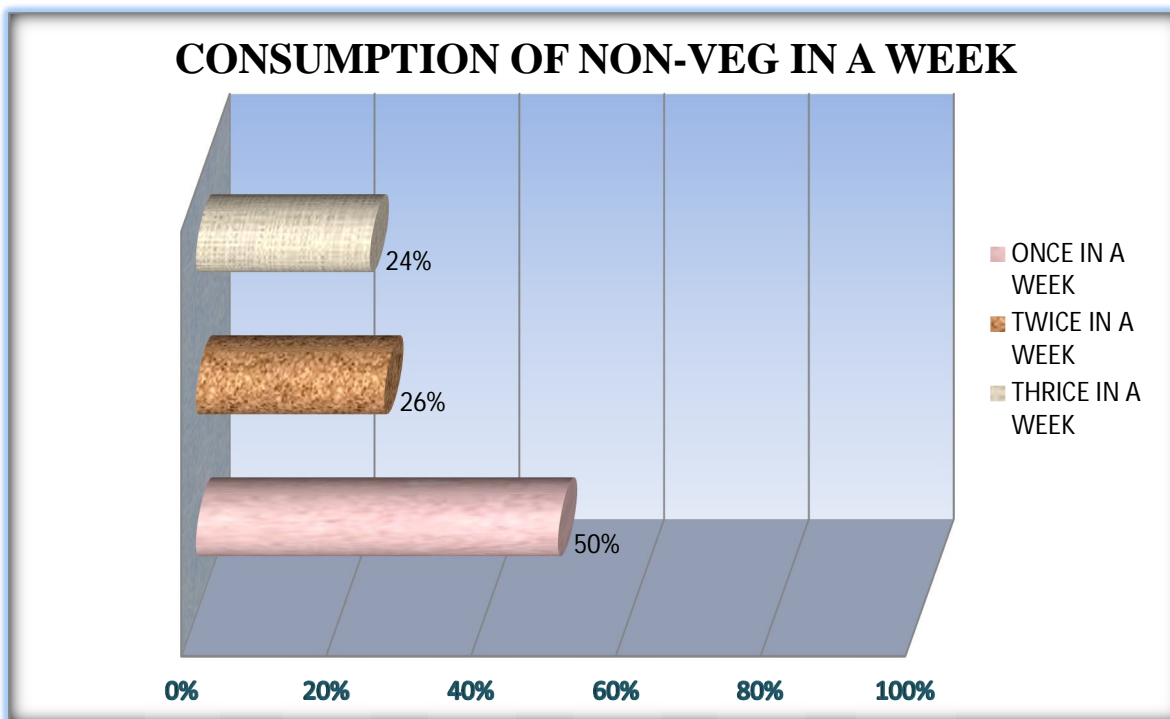
Out of 75 girls 55% of girls consume fruits daily whereas 45% of girls do not consume fruits on a regular basis.

10)



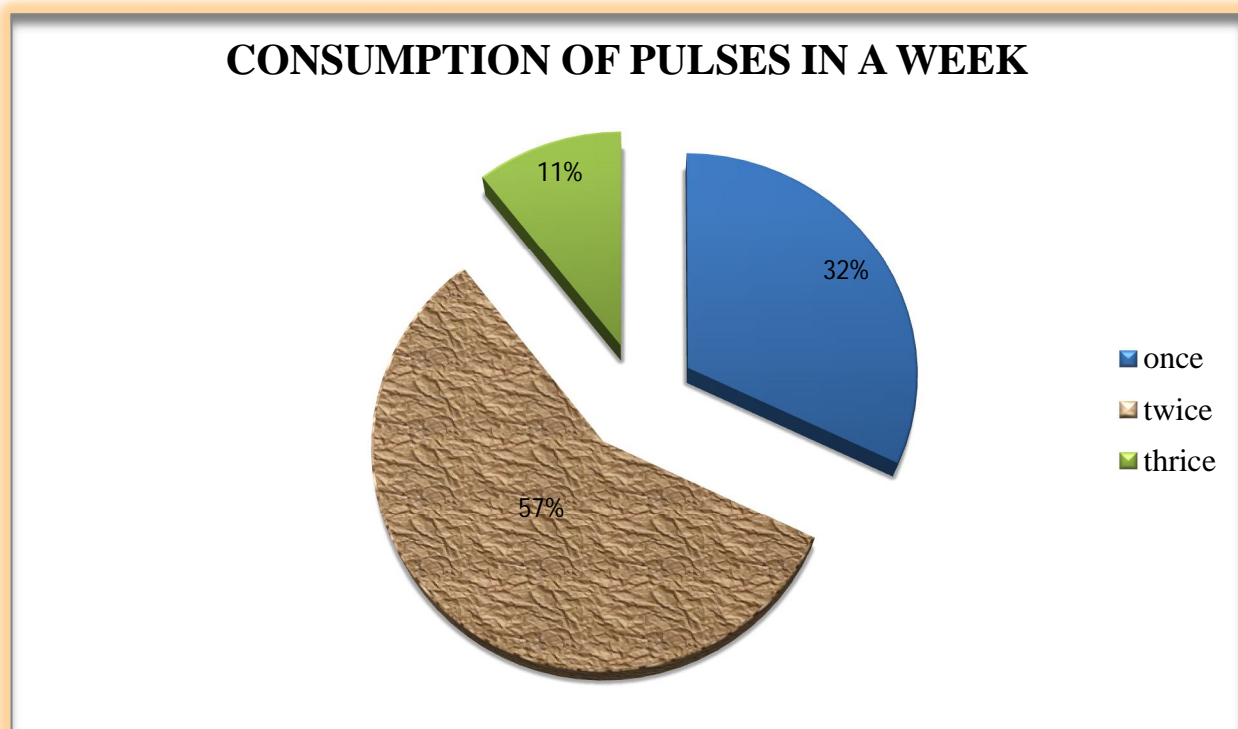
Out of 75 girls 49% of girls consume chicken 27% of girls prefer to consume meat and only 24% of girls consume fish as a source of non-veg.

11)



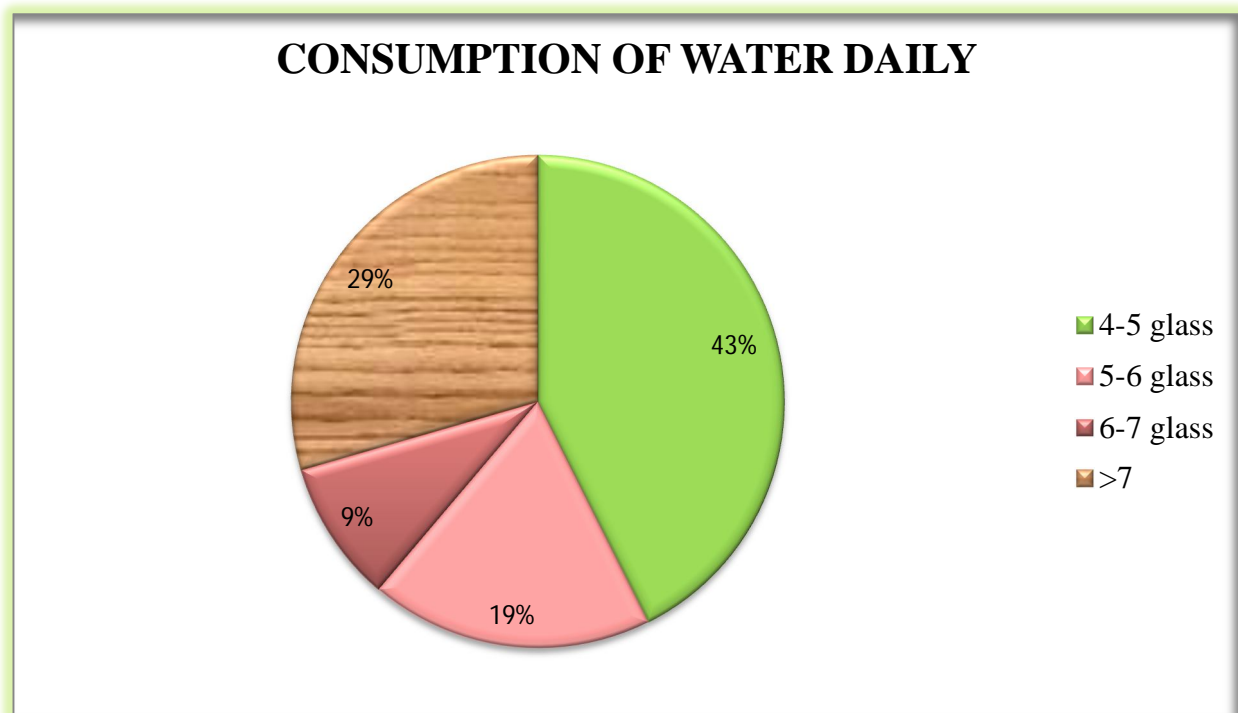
Out of 75 girls 50% of them consumes non veg once in a week whereas 26% of them consume twice in a week and about 24% of them consume non veg 3 times in a week.

12)



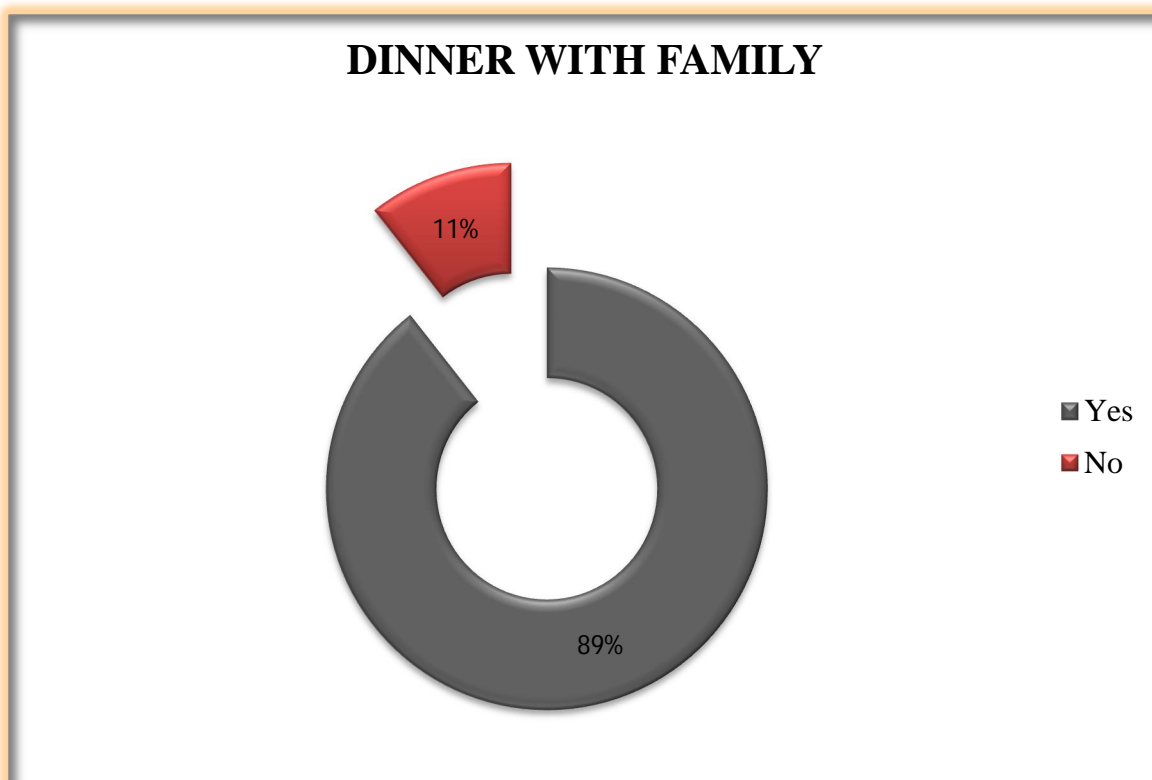
It was found that 57% of girls consume pulses twice in a week whereas 32% of them consume once in a week and the rest 11% of them consume pulses 3 times in a week.

13)



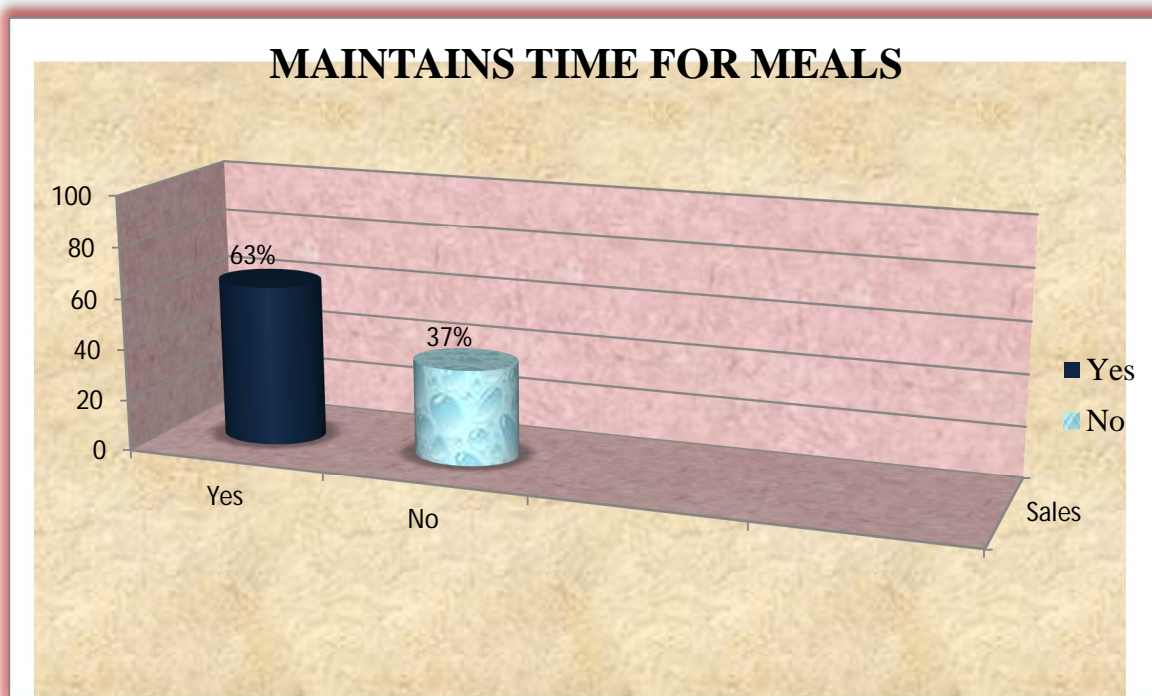
Out of 75 girls 43% girls drink 4-5 glasses of water in a day, 29% of them consume more than 7 glasses and 19% of them drinks 5-6 glasses of water and the rest 9% of them drinks 6-7 glasses of water in a day.

14)



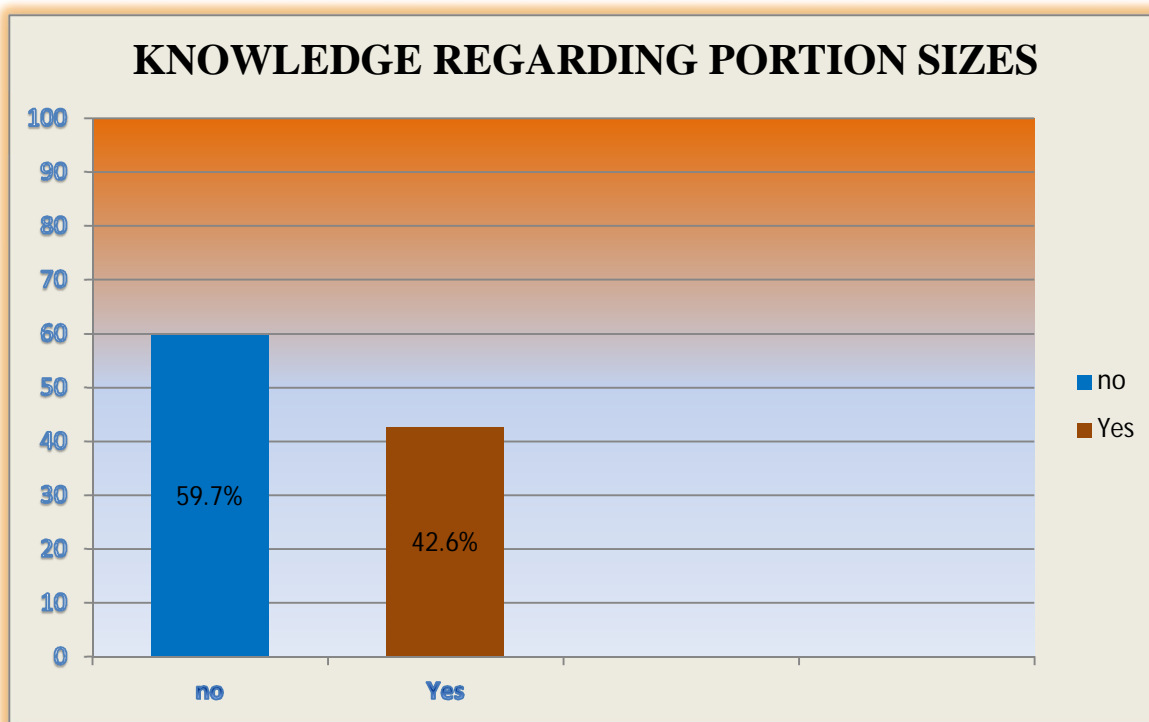
89% of girls consume their dinner with family whereas 11% of them do not consume dinner with family on regular basis.

15)



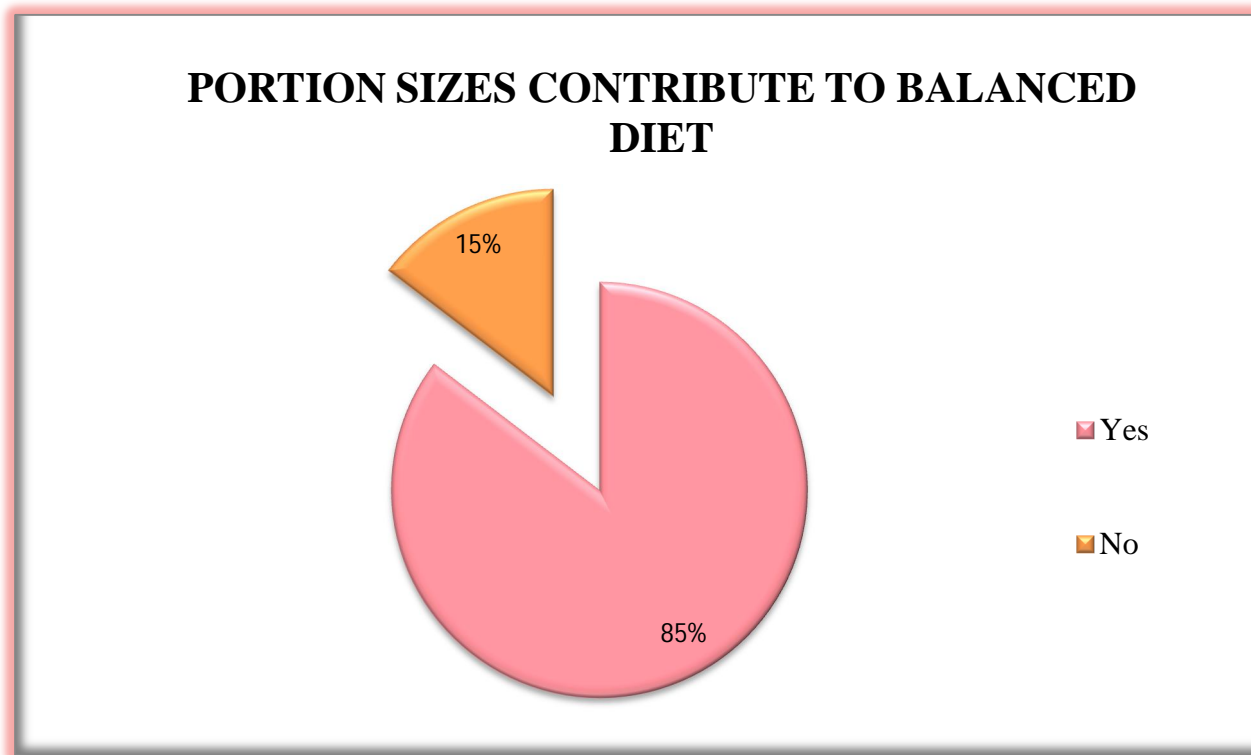
Out of 75 girls 63% Of them maintains time for consuming meal whereas 37% of them do not have a habit of maintaining time for consumption of meal.

16)



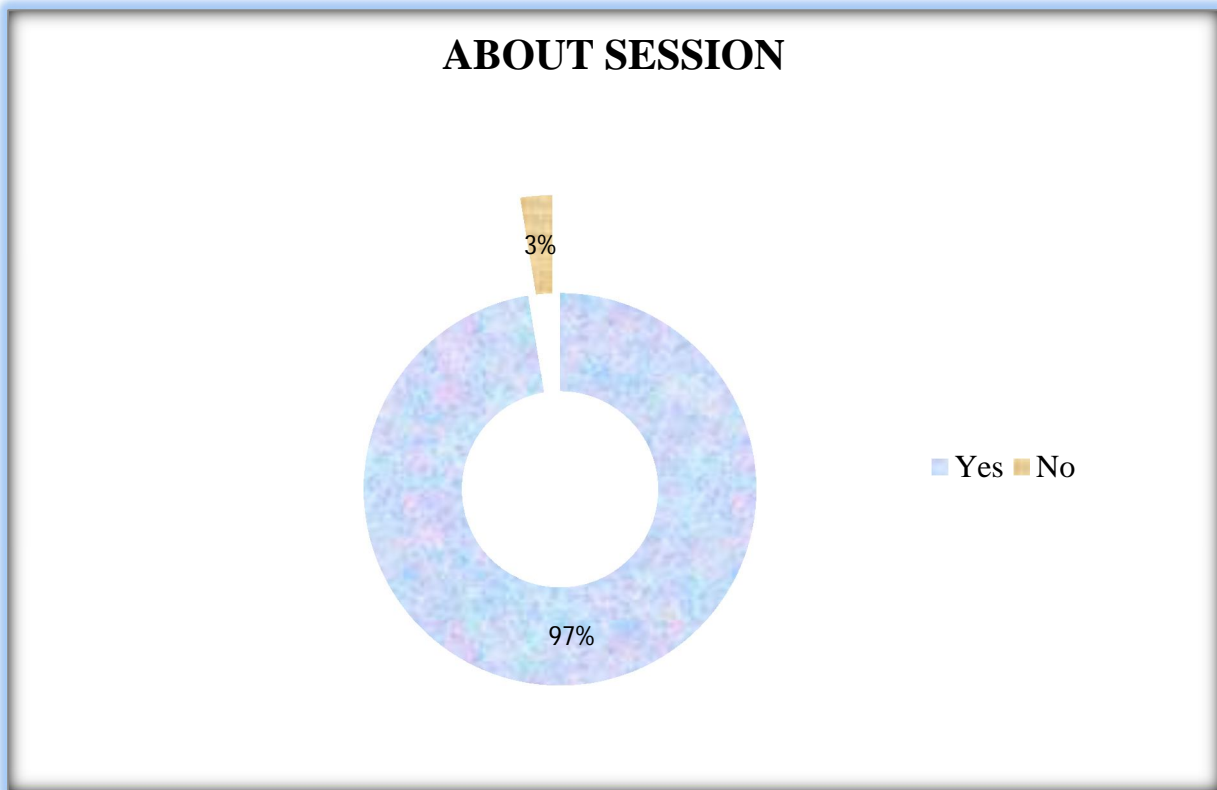
It was found that 59.7% of the girls was unaware about portion sizes whereas 42.6% have some idea regarding portion sizes of food.

17)



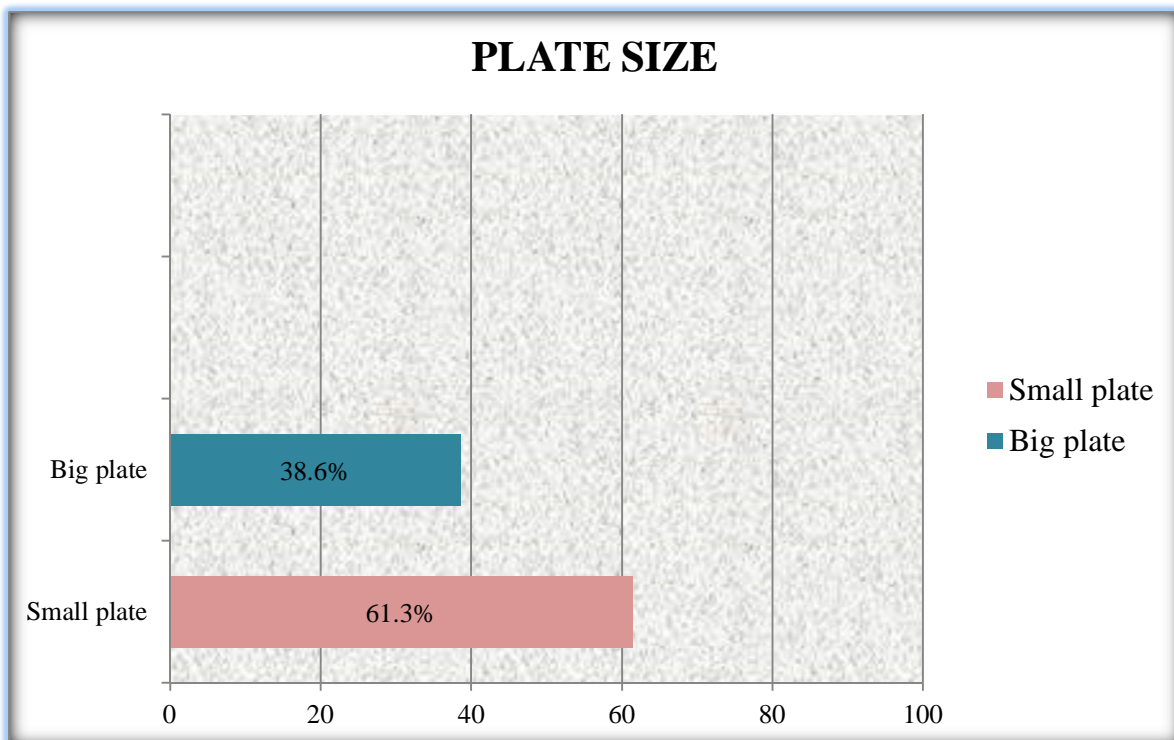
85% of girls thinks that maintaining or eating in portion sizes contributes to a balanced diet whereas 15% of girls do not agree with this aspect of relationship between portion sizes and balanced diet.

18)



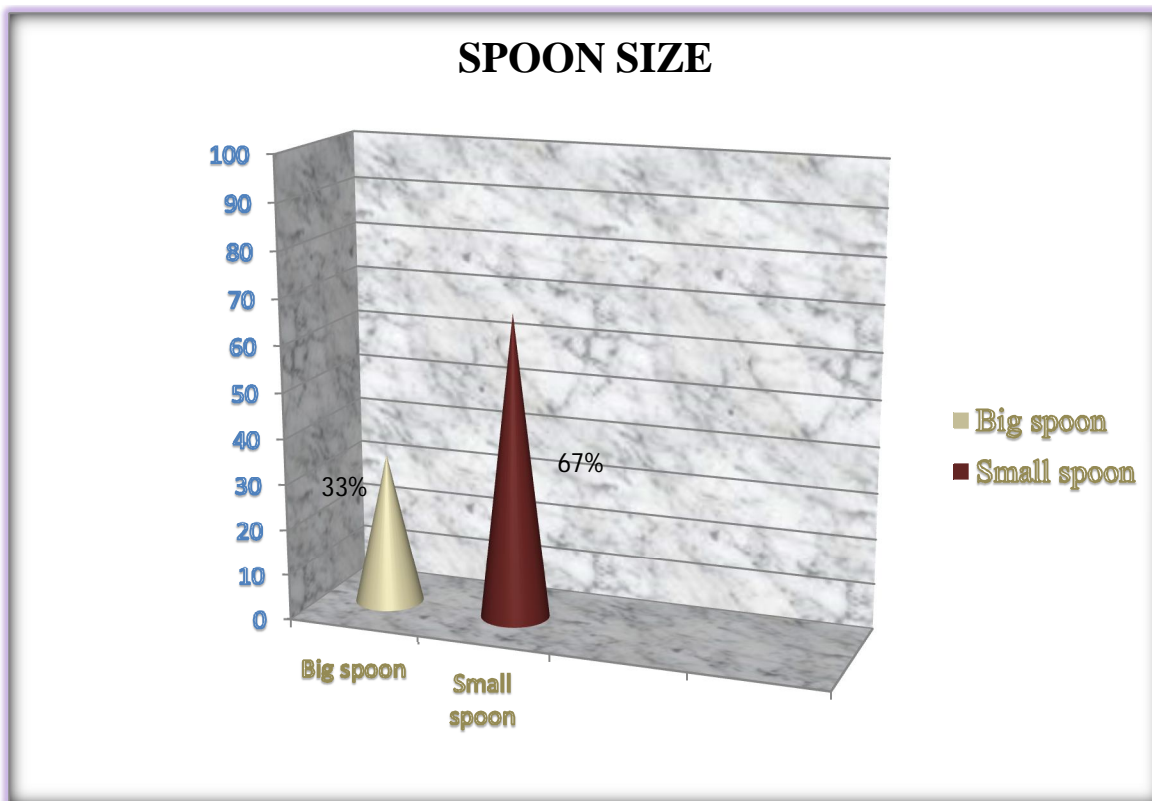
Out of 75 girls 97% of girls found this mini session helpful and 3% of them do not found this session that helpful accordingly.

19)



61.3% of the girls prefer to eat in a small plate whereas 38.6% of them like to eat in a big plate.

20)



67% of girls were found to use small spoons to add oil to the food preparation whereas 33% uses big spoon to add oil to the preparations on a regular basis.

### III. SUMMARY AND CONCLUSION

#### A. Summary

A group project on topic “Awareness of portion sizes among adolescent girls” was carried out in the college. Portion sizes can be defined as the amount of food you choose to eat during a single eating occasion. While a serving is a standardized measurement of food or drink or the amount of each food that you are supposed to eat during a meal.

Portion sizes for adolescent girls :

Cereals and millets should be 11 serving per day.

Pulses should be consumed 2.5 serving per day.

Milk and its products should be given 5 serving per day.

Roots and tubers should be 2 serving in a day.

Atleast 1 serving of green leafy vegetables should be consumed daily.

Other vegetables should be consumed twice daily and fruits atleast 1 time in a day.

Sugar and fats, oils should be consumed five and seven servings respectively per day

The study was conducted using questionnaire method among the adolescent of Anwar ul uloom college, new mallepally, Hyderabad.

They were given an awareness program using informative and attractive chart.

The survey gives us a picture regarding the nutrition status and knowledge of portion sizes among the adolescent girls.

It was found that about 42.6% of girls were aware about portion sizes of food whereas 59.7% of them are not aware of portion sizes.

About 33% of girls has a habit of consuming junk food on a regular basis whereas 67% of girls do not consume junk food.

The chart consists of different hand symbols which shows the serving sizes of cereals, non-veg, nuts, oils, fats and sugars for which hand symbol used are fist for cereals, palm for non-veg, one hand full for nuts, two hand full for popcorn and chips, a thumb for peanut butter and hard cheese and finally thumb tip is used for cooking oil, mayonnaise, butter and sugar.



#### IV. CONCLUSION

After carrying out of the survey, keeping in mind all the gathered information and data, it was concluded that the adolescent girls has some knowledge about portion sizes, they were very interested to know more about portion sizes and said that the program was very attractive and helpful.

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