

COMMUNITY SERVICE PROJECT  
on  
AWARENESS ON FOOD ADULTERATION IN  
GANESUNIPALEM, VINUKONDA MANDAL, PALANADU(DIST)

By  
GADIBOINA BRAHMA NAIDU

HALL TICKET NO: Y203099012

IV SEMESTER

B. SC (B. Z. C)



*Under the supervision of*  
**DR. K. V. S. KOTESWARA RAO** *M.Sc., Ph.D.,*  
LECTURER IN CHEMISTRY,  
S. G. K GOVERNMENT DEGREE COLLEGE,  
VINUKONDA

THE THESIS IS SUBMITTED TO ACHARYA NAGARJUNA UNIVERSITY  
IN PARTIAL FULFILLMENT OF THE REQUIREMENTS  
FOR THE DEGREE OF  
**BACHELOR OF SCIENCES**  
**JUNE - 2022**

Dedicated to



Evaluation sheet

Log book -	2011
Project implementation -	3011
Project Report -	2511
presentation -	2511
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Signature of the Committee

K.V.S. KOTKOW ✓  
30/06/2022

Vertical  
level



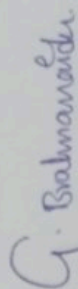
## ACKNOWLEDGEMENTS

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Signature of the student



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[www.sgkgdvinukonda.ac.in](http://www.sgkgdvinukonda.ac.in)

Dr. K. V. S. KOTESWARA RAO,  
Head - Chemistry  
Email ID: kvskr@rediffmail.com  
Mobile : 9182489992

Date: 30-06-2022

**CERTIFICATE**

This is to certify that the work incorporated in this Community Service Project entitled "AWARENESS ON FOOD ADULTERATION IN GANASUNI PALEM, VINUKONDA MANDAL", is a bonafide work carried out by GADIBOINA BRAHMA NAIDU II B.Sc(B.Z.C), under my supervision.

*K. V. S. Koteswara Rao*  
Signature & Name of Mentor  
(Dr. K. V. S. KOTESWARA RAO)

#### DECLARATION

I hereby declare that the Community service project embodied in this work entitled  
"AWARENESS ON FOOD ADULTERATION IN GANASUNI PALEM,  
VINUKONDA MANDAL," submitted to S.G.K. Government Degree College,  
Vinukonda affiliated to Acharya Nagarjuna University for the award of degree of  
Bachelor of Science is the outcome of investigations carried out by me under the  
supervision of Dr. K.V.S.Koteswara Rao, Lecturer in Chemistry, S.G.K. Government  
Degree College.

I declare that the work incorporated is original and due acknowledgement has  
been made wherever it is not so. The same has not been submitted elsewhere for any  
degree or diploma.

I also declare that I myself solely responsible for the genuineness of the  
findings / observations pertaining to these studies in order to compile this thesis.

Place: Vinukonda

Date: 30/06/2022

G. Brahmananda Chaitanya B.Sc CBZ  
Signature & Name of the candidate

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PART A

S.No.	
L1.	INTRODUCTION
L2.	SOCIO-ECONOMIC SURVEY OF THE VILLAGE/HABITATION
L3.	PROBLEMS IDENTIFIED AND ANALYSES OF THE PROBLEMS
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**1) INTRODUCTION**

Community Service Project is an experiential learning strategy that integrates meaningful community service with instruction, participation, learning and community development. Community Service Project involves students in community development and service activities and applies the experience to personal and academic development.

Community Service Project is meant to link the community with the college for mutual benefit. The community will be benefited with the focused contribution of the college students for the village/ local development. The college finds an opportunity to develop social sensibility and responsibility among students and also emerge as a socially responsible institution.

For this above-mentioned community service project, I have selected my native place, Kanchunipalem, a small hamlet, is attached to Koppukonda panchayati, it sits snugly in the midst of forest, surrounded by hills which are stretched to 15 kms of distance. It is in the remote pockets of the newly formed Palanadu district. It is situated 35 kms away from Mandal headquarters, Vinukonda. Adjacent to our village, Kanchunipalem, one river namely Gundlakamma flows to its brim in rainy season. Towards North of the village a big mango orchard is developed and it's ready for fruition. Nearer to the village one famous Hindu temple i.e. Prasannajaneya swami temple is present, from that temple the village got name and fame. According to our elders version, the idol of the temple is manifested from the ravines of the nearby hills and they brought it, erected a temple and started deifying it. Every Monday and Saturday people of nearby villages flock the village to worship the idol. Every year in April people conduct village ritual to the idol, thousands of people through the temple from far and near.

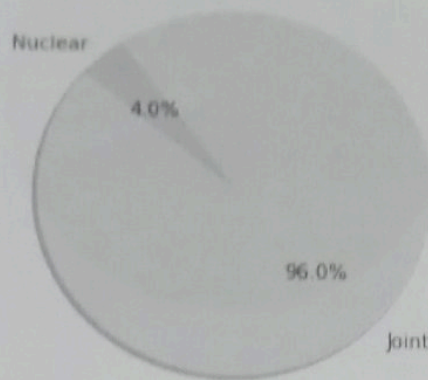
Our village is surrounded by green grass lands adding beauty to nature. Towards East of the village hundreds of acres of wet land gives feeding to the villagers. At the North East corner of the village, recently sandal wood plantation is done. There is beautiful biodiversity in and around the village with river, orchard, wet lands, grass lands and fields.

This village is a part of Vinukonda Mandal located near to the Vinukonda to Markapur road in Palanadu district of Andhra Pradesh. Nearly 200 households are there. Most of the people depend on Labour work in this village. These people are not aware of food adulteration and safety food.



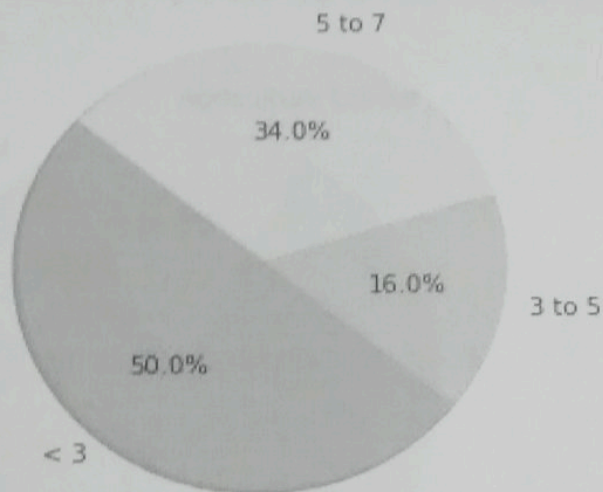
**d) Nature of Family:**

Almost all the families are joint (96%) only 4% of families are nuclear.



**e) Members in family:**

About 50% of people are living in the family consisting of less than three members. Whereas 16% of families are having 3-5 members, 36% of families are having 5-7 members. Not even a single family is having more than seven members.

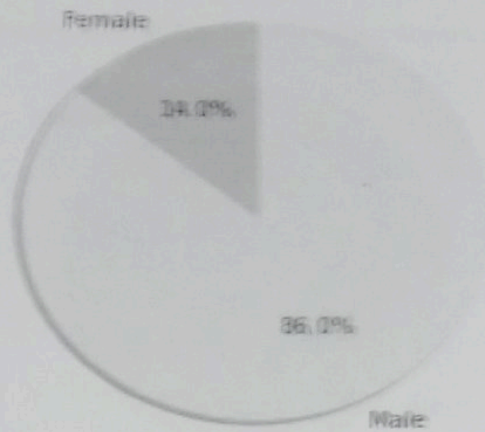


**f) Educational Qualifications:**

As it is a village most of the people are uneducated (82%). 10% of people studied up to 5<sup>th</sup>, 8% of people studied up to 10<sup>th</sup>.

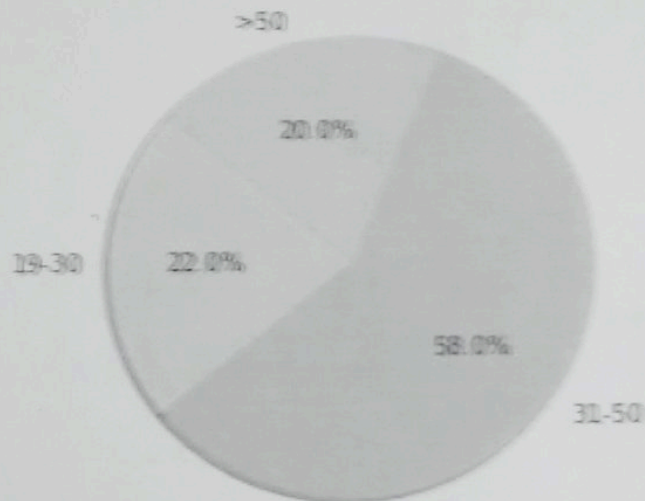
#### a) Gender:

In this study we came to know, most of the food items are being purchased by men (86%) as the village is bit far. All the required items are brought by men in the starting of month itself.



#### b) Age:

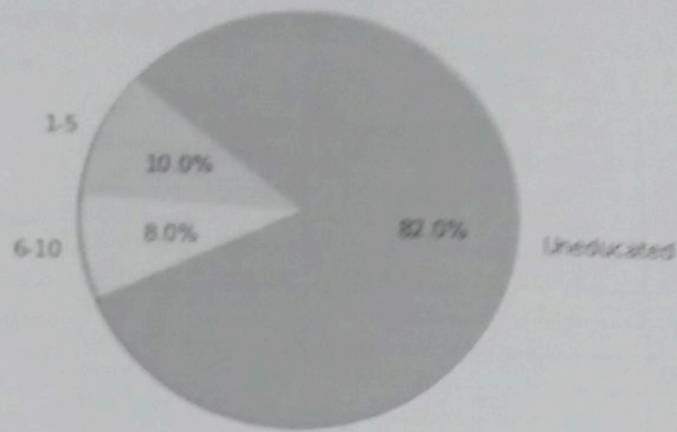
About 22% of people are between 19-30 years old, 58% aged between 31-50, 20% people are more than 50 years old.



#### c) Marital status:

All the people participated in this survey are married (100%).



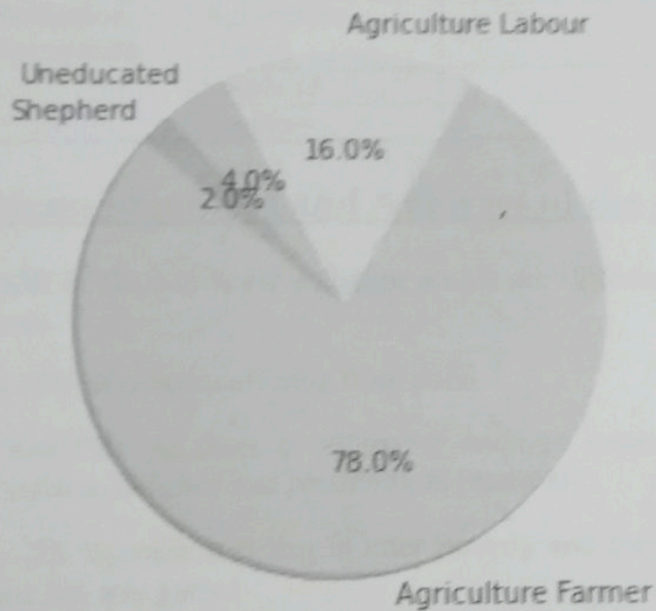


**g) Annual Income:**

The annual income of all the people is less than 60000.

**h) Profession/ Occupation:**

Most of the people are farmers (78%), 16% of people are Agriculture labours, 4% of people are shepherds and 2% of people are doing own business-like provision shops in this village.





11 We have created awareness about diseases caused by House flies

12 House flies are strongly suspected of transmitting at least 65 diseases to humans, including typhoid fever, dysentery, cholera, poliomyelitis, yaws, anthrax, tularemia, typhus and tuberculosis. We asked them to cover food with lids so that the chance of getting sick will be reduced

13 House flies

14 We have created awareness among people not to burn any materials around their huts.

15 We have created awareness to put the bills to the government to build a house.

16 Roadside

17 We have advised all the villagers to do daily shramadana (at least 30 minutes) to improve the potholes formed on the road

18 We asked the people to meet Sarpanch first to repair the roads or lay new roads. We also told them to give the petition to your Mandal ML A through our sarpanch.

## 19 CONVENTIONAL ISSUES

20 We are told to avoid blood relation marriage as much as possible and talked about the disadvantages/problems of blood relation marriage and also created awareness about the diseases and syndromes that result from it. Those diseases are as follows:

- 21 Autosomal disorders
  - 22 Birth defects or congenital anomalies
  - 23 Early hearing impairment
  - 24 Early vision impairment
  - 25 Mental retardation or learning disability
  - 26 Developmental delay or failure to thrive
  - 27 Unexplained neonatal or infant death or offspring
  - 28 Epilepsy
  - 29 Undiagnosed severe condition
  - 30 Hypothalamic/hormone deficiency at birth
  - 31 Infertile blood disorders

#### 4. Community awareness programs conducted w.r.t the problems and their outcomes.

##### i. ALLERGIES: -

- We have created awareness that drinking boiled and cooled water as much as possible can prevent diseases caused by some types of algae and bacteria.
- Can someone be allergic to water? It may seem like a strange question, but the answer is "yes." There is a very rare condition known as aquagenic urticaria (AU) where skin contact with water causes itchy, red hives or swelling. In severe cases, it can cause wheezing or shortness of breath.
- People with liver problems have been made aware that if they get allergies, they will get neurological disorder. So asked them to consult a doctor immediately.
- We have created awareness by saying them consuming algae-enriched water can lead to gastro intestinal irritation, including vomiting, diarrhea, fever and headache.
- Along with Allergies, other symptoms are as follows
  - Respiratory irritation
  - shortness of breath
  - Throat irritation
  - Eye irritation
  - Skin irritation
  - Asthma attacks

##### ii. POLIO: -

- We have created awareness about the problems related to polio.
- We made them aware of the symptoms of polio in the first 10 days. They are as follows:
  - Fever
  - Headache
  - Vomiting's
  - sore throat
  - uneasy
  - Back pain
  - Muscle weakness

##### iii. DRAINAGES: -

- i. We have created awareness about mosquito borne diseases and they are as follows:
    - a. Zika
    - b. Dengue
    - c. Chikungunya
    - d. Yello fever
    - e. Rift valley
    - f. Plasmodium diseases (female anopheles mosquito)
- we gave them some tips to get rid of those mosquitos as well. These tips make the people healthy which results in healthy village.



Table: 1 Socioeconomic survey of Ganesunipalem

S.No	Variables		No of Households (out of 50)	Percentage
1	Gender	Male	43	86%
		Female	07	14%
2	Age in Years	<18	00	00
		19-30	11	22
		31-50	29	58
		>50	10	20
3	Marital Status	Married	50	100
		Un married	0	0
4	Nature of Family	Joint	48	96
		Nuclear	2	4
5	Members in family	< 3	25	50
		3 to 5	8	16
		5 to 7	17	34
		Above 7	0	0
6	Educational Qualifications	1-5	5	10
		6-10	4	8
		Uneducated	41	82
7	Annual Income	<60,000 Rs	50	100
		>60,000 Rs	0	0
8	Profession/ Occupation	Agriculture Farmer	39	78
		Agriculture Labour	8	16
		Shepherd	2	4
		Business	1	2

### 3. Problems identified and Analyses of the problems.

- i) ALLERGIES: -Due to water pollution people are suffering from allergies and liver related issues.
- ii) POLIO: -3% of people suffering from polio
- iii) DRAINAGES: -As there is no proper drainage system, water stagnates giving chance to malaria, diarrhea and plasmodium (motions)
- iv) HUTS: -25 %people still live in utter poverty and they live small thatched huts. Recently one hut was gutted.
- v) ROADS: -The villages lacks of proper road facility. Even the dusty road also is filled with pot holes, resulting in number of accident and untold miseries.
- vi) CONGENITAL ISSUES: - congenital marriages are Prevalent, resulting in mentally retarded or physically challenge of off springs. some of them are also suffering from genetically related issues due to these blood related issues



- 2.1. IMPORTANCE OF STUDY ON FOOD ADEQUATION
- 2.2. OBJECTIVES OF FOOD ADEQUATION
- 2.3. SCOPE OF THE STUDY
- 2.4. RESEARCH
- 2.5. RESEARCH METHODOLOGY
- 2.6. SAMPLE SIZE AND SAMPLING METHOD
- 2.7. TOOLS USED FOR ANALYSIS
- 2.8. RESULTS AND DISCUSSION

**1) Importance of study on Food adulteration:**

These days food contamination is one of the major problems that is affecting the health of people. There are adverse effects on the health of people when they consume adulterated food. Significant food hazards include pesticide residues, microbial hazards, misuse of additives, chemical contaminants, including biological toxins and adulteration<sup>(1-3)</sup>. Food adulteration occur due to the following reasons:

- To attract the consumers by giving more taste to the products by adding hazardous chemicals.
- To increase the quantity of products with less cost.
- To get more profit.
- To have an increased the life of food and soon.

We came across several articles in newspapers that some of the fruits and vegetables sellers are injecting harmful chemicals into them for giving good taste and to increase time for rotting which is becoming very harmful to human health. In order to get rid of such health issues each and every one must be aware of food adulteration risks, necessary laws and the consumer are essential<sup>(6-16)</sup>.

The food products which were usually adulterated include fruits, meat, milk, vegetables, fish, wheat, butter, ghee, spices, rice, bacon, sweetmeats, beverages, baby foods etc<sup>(7-24)</sup>. The fruits were mixed with calcium carbide, thiophene, formalin, color injections and sweeteners for getting good taste and fast ripening. These chemicals even lead to cancer and many more adverse effects on health. A large amount of pesticides are being used in vegetables while cultivation. Many daily food products such as cabbage, potato, banana, tomato, mango, etc, were infected with poisonous pesticides, as National Food Safety Laboratory (NFSL) reported<sup>21</sup>. DDT (Dichloro diphenyl trichloro ethane) was being used at a high amount in dried fishes<sup>20-23, 25</sup>. There are many ways to adulterate milk one can even turn two litres of milk in to a big can of milk, by adulteration. Milk was found to be contaminated by formalin, water, urea, Dalda for getting percentage, extracting fat, wheat flour, powder milk, thickeners. Powder milk is mixed with melamine or aldrin<sup>20-25</sup>. Poisonous color and formalin is being used in meat<sup>20, 25, 28, 29</sup>. Vegetable oils were contaminated with in edible oils, which are cheap<sup>20, 27</sup>. Rice was contaminated with pieces of urea, pebbles and dyes<sup>24, 26</sup>. Chili powder was mixed with brick dust and Sudan red color, while met nil yellow and colored chalk powder adulterated the turmeric powder<sup>20-25</sup>. Black pepper was contaminated with dried papaya seeds, and colored sugar syrup is used for honey<sup>20</sup>. Tea was adulterated with wasted tea leaves and saw dust. While highly injurious to health, textile dyes were used spontaneously as coloring agents in many types of food products<sup>23, 24, 29</sup>. Carcinogenic substances artificially ripen the papayas and bananas<sup>20-27</sup>. Preservatives are being used in different food over permissible level<sup>30</sup>. Food adulteration is a serious crime which is punishable under the law. Consumption of adulterated food can cause serious disorders such as diarrhea, asthma, ulcers, food



poisoning, cancer and may even result in death<sup>31</sup>. The health hazards of adulteration mentioned as below according to Yojana.

Table 1: Health Hazards of Adulteration

Sr. No.	Adulterant	Food Adverses	Effects on Health
1	Agumose oil	Oils and fats	Epidemic dropsy, glaucoma, blindness, cardiac arrest.
2	Pesticide Residue	All types of foods	Acute or chronic poisoning, with damage to nerves and vital organs
3	Mineral oil used motor oil	Oils and black pepper	Diarrhea, vomiting, cancer
4	Methyl alcohol	Alcoholic liquors	Blurred vision, blindness, death.
5	Lead chromate	Turmeric and powder mixed spices	Anemia, brain damage.
6	Mercuric Yellow	Turmeric, mixed spices, saffron, dehusked pulses, rice, golden beverages	Tumours, cancer, testicular degeneration in males
7	Lead	Tap water, some processing foods	Lead poisoning, causing footdrop, anemia, brain damage
8	Neuralgic	Pulses and besan	Paralysis of legs
9	Dung	Coriander powder	Tetanus
10	Leaf filling	Suit tea leaves	Possibility of tetanus

Source-YOJANA, April 16, 1980, page 16 "Government of India"

So, the food safety awareness among consumers is a very important and interesting research issue.

## 2. OBJECTIVES OF FOOD ADULTERATION

- 1) To study and create the awareness about food adulteration.
- 2) To study the effects of food adulterants and let people know about them.
- 3) To know the adulteration in selected food products through various testing procedures.
- 4) To recommend suggestions on food adulteration to manufacturers and consumers.

## 3. SCOPE OF THE STUDY

If we increase awareness among people regarding food adulteration then there are more chances to take unadulterated food which leads to healthy life of people. As the rules and laws are getting increased day by day against food adulteration, there is much more chance of consuming unadulterated food by the people. With the help of this survey, we educated each and every one by letting them know their rights as a consumer (how to react when their consumer rights are failed to follow), shared many details regarding FSSAI and many more. By doing this survey based on food adulteration many common people may know about the adulterated products that they are using in day-to-day life. They can get awareness about the food adulteration that causes many health issues in human life.

## 4. RESEARCH METHODOLOGY:

The research is based on the consumer awareness towards food adulteration. It is used to obtain the current information the current status of the phenomena to describe what exists.



## 5. SAMPLE SIZE AND SAMPLING METHOD

The sample of 50 respondents was chosen for the study. For purpose of the study, convenient random sampling technique has been adopted.

Simple random sampling is the basic sampling technique where we select a group of subjects (a sample) for study from a larger group (a population). Each individual is chosen entirely by chance and each member of the population has an equal chance of being included in the sample. Every possible sample of a given size has the same chance of selection. (Definition taken from Valerie J. Easton and John H. McColl's Statistics Glossary v1.1)

### 6) TOOLS USED FOR ANALYSIS:

On the basis of the questionnaire, the awareness of the consumers was analyzed in Microsoft excel. The results were shown using the pie charts and tables. The following are the tools applied on the responses given by the respondents to analyze and derive the results.

- Simple percentage analysis.
- Weighted average method.

Table: 2 Percentage of Responses through options question wise

Options	1		2		3		4	
Q. No	Agree	%	Agree	%	Agree	%	Agree	%
1	2	4%	48	96%	-	-	-	-
2	3	6%	0	0%	29	58%	18	36%
3	3	6%	47	94%	-	-	-	-
4	6	12%	3	6%	41	82%	-	-
5	13	26%	7	14%	30	60%	-	-
6	14	28%	5	10%	31	62%	-	-
7	8	16%	3	6%	39	78%	-	-
8	2	4%	48	96%	-	-	-	-
9	4	8%	46	92%	-	-	-	-
10	35	70%	6	12%	4	8%	5	10%
11	2	4%	48	96%	-	-	-	-
12	3	6%	2	4%	45	90%	-	-
13	0	0%	7	14%	1	2%	42	84%
14	2	4%	1	2%	47	94%	-	-
15	23	46%	0	0%	0	0%	27	54%
17	35	70%	0	0%	15	30%	-	-
18	30	60%	20	40%	-	-	-	-
19	1	2%	49	98%	-	-	-	-
20	0	0	50	100%	-	-	-	-
21	12	24	38	76%	-	-	-	-

## 7. Results and Discussion

The consumers were asked to write background information like name, sex, age, educational qualification, house rent (to assess financial condition). They were also asked to answer the following questions. According to the survey taken on consumer awareness the following analysis was attained.

### 1. Which form of products do you prefer?

(a) Open (b) Packed

In the survey we came to know that 4% of people are preferring open/loose products where as 96% of people are preferring packed products.

Packed products are mainly wheat, Turmeric powder, chili powder, Maida, Salt, Snacks like biscuits, chocolates, etc... They said that they will be going for open products only in the absence of packed products and sudden requirement is there.



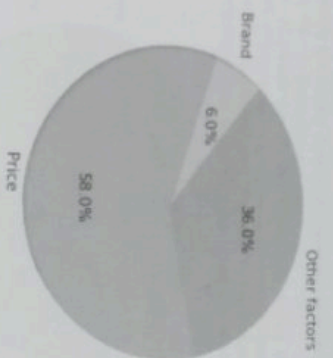
Figure1. A chart showing percentage of parameter of choice (Open, closed) during buying a product.

### 2. Which is the main parameter of choice during buying a product?

(a) Brand (b) Shop (c) Price (d) Other factors

In the survey we came to know that 6% are buying products based on brand, 58% based on price, 36% are buying goods based on other factors like availability. But no one is preferring shop.

The people who are buying things based on brand are choosing Aashirvad for wheat, Tata for salt, Colgate for paste, Shastri balm for pain balms, Volini for spray etc... As most of the people's annual income is very low, they are preferring products that are available with less cost. There are many other reasons for choosing products as well.



**Figure2.**A chart showing percentage of parameter of choice (Brand, Shop, Price, Other factors) during buying a product.

### 3. Do you know about the Food Safety and Standards Authority of India?

(a) Yes (b) No

It is very sad to know that only 6% of people know about Food Safety and Standards Authority of India (FSSAI) and 94% of people are saying they don't even hear it till now. The reason behind this is they are not well educated so they don't know all these things.



**Figure3.**A chart showing percentage of people having knowledge of FSSAI.



4. Do you observe the expiry date of the food items when you buy them?

1) Yes 2) No 3) Sometimes

Only 12% of people are regularly checking expiry date before buying any product, 6% of people don't even check even single time, and 82% of people are checking expiry date sometimes. We came to know that the main reason behind not checking Expiry date is that they don't know how to check.

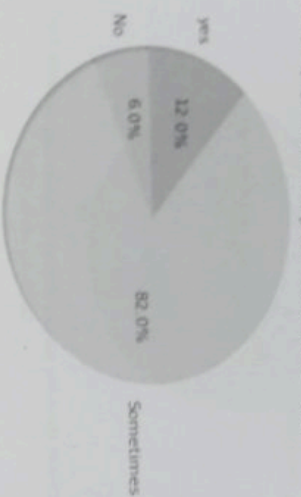


Figure4. A chart showing percentage of people checking Expiry date on products while buying.

5. Do you check the MRP (Maximum Retail Price) before buying a product?

1) Yes 2) No 3) Sometimes

We came to know that only 26% of people are regularly checking MRP of products, 14% of people are not checking and 60% of people are checking sometimes.

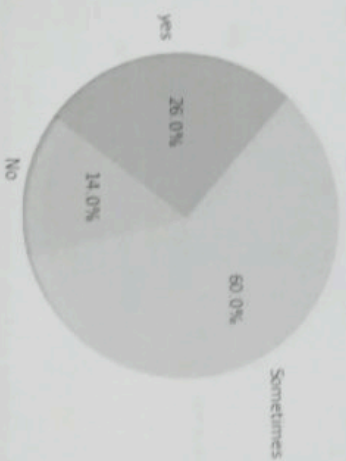
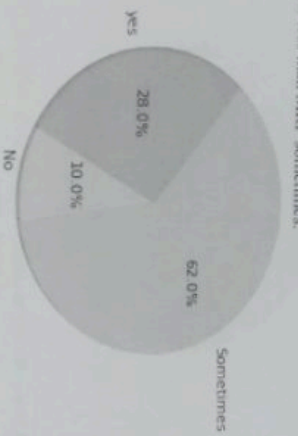


Figure5. A chart showing percentage of people checking MRP on products while buying.

6. Do you pay Money more or less than MRP of Food item?

1) Yes 2) No 3) Sometimes

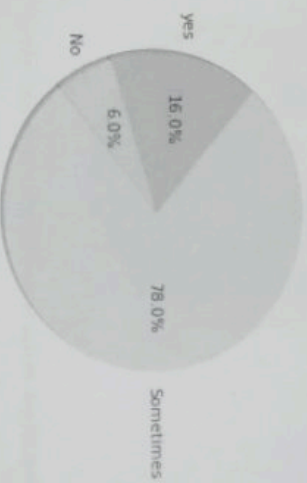
It is surprising to know that 28% of people are getting goods less than MRP, 10% of people are not getting products less than MRP and 62% of people are getting products less than MRP sometimes.



**Figure6.** A chart showing percentage of people getting products more/less than MRP of the product.

**7. Have you ever cross checked the weights of Products mentioned on the item?**

- 1) Yes 2) No 3) Sometimes  
In this survey we came to know that, 16% of people are checking weight of the products, 6% of people are not checking weight of the items and 78% of people are checking sometimes.



**Figure7.** A chart showing percentage of people checking weights of the goods mentioned on the items.

**8. Are you aware of the effects of adulterants that can cause health problem?**

- 1) Yes 2) No  
It is very shocking that only 4% of people had an idea about the adverse effects of consuming adulterated food, 96% of people don't have any idea regarding it.





**Figure 8.** A chart showing percentage of people aware of the effects of adulterants that can cause health problems.

9. Have you ever come across adulteration or duplication items?

- 1) Yes 2) No

Only 8% of people are saying that they came across adulterated/ duplicated items, 92% of people don't.



**Figure 9.** A chart showing percentage of people came across adulterated food.

10. Give some examples about food adulteration.

Mostly milk, vegetables, fruits, some of the flours, spices are getting adulterated in a large scale.

11. Are you aware that chemical dye and toxic substances in food can lead to cancer and different vital organ diseases?

- 1) Yes 2) No

Only 4% of people had an idea that chemical dye and toxic substances in food

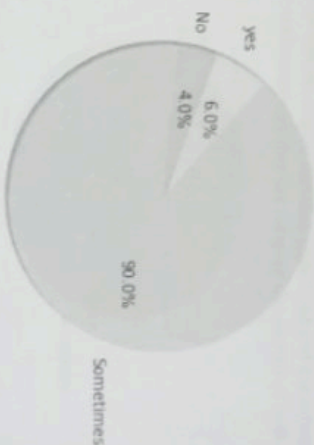


**Figure1.** A chart showing percentage of people aware of chemical dye and toxic substances in food can lead to cancer and different vital organ diseases.

**12. Do you buy things carefully to avoid adulteration?**

- 1) Yes 2) No 3) Sometimes

In this survey we came to know that only 6% of people are buying products carefully, 4% of people are not taking any care and 90% of people are taking care sometimes.



**Figure12.** A chart showing percentage of people buying things carefully to avoid adulteration.

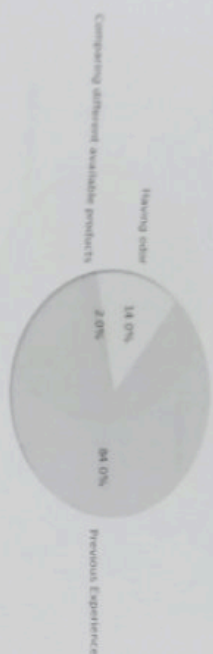
**13. Which kind of cautions do you take during buying?**

- 1) Observing physical appearance of the product 2) Having odor  
3) Comparing different available products 4) Previous Experience

14% of people are buying products based on odor, 2% of people are buying products based on the comparison of availability of different products and 84%



of people are buying products based on previous experience but no one is buying products based on observing physical appearance of the product.



**Figure 13.** A chart showing the percentage of people taking cautions during buying products (Observing physical appearance of the product, Having odor, Comparing different available products, Previous Experience).

#### 14. Have you decreased the extent of food buying or intake due to adulteration?

- 1) Yes 2) No 3) Sometimes

4% of people are saying that they are reducing the amount of food intake due to adulteration 2% of people are saying that they hadn't reduced the extent of food and 94% of people said sometimes they are reducing the amount of intake.



**Figure 14.** A chart showing the percentage of people decreasing the extent of food buying or intake due to adulteration.

#### 15. What do you think which kind of steps should be taken to overcome food adulteration problems?

- 1) Public awareness 2) Proper Information about adulteration  
3) Media 4) Government

In this survey we came to know 46% of people are feeling that adulteration can be reduced if we create public awareness on food adulteration and 54% are feeling that this can be done with the help of government.



**Figure15.** A chart showing percentage of people feeling that the steps should be taken to overcome food adulteration problems.

**16) Have you ever complained to any of following after coming across adulteration or duplication items?**

- 1) Shopkeeper 2) Main Supplier 3) Any Other

70% of people said that they complained about the products to the shop keeper and 30% of people complained to others.



**Figure16.** A chart showing percentage of people ever complained regarding adulteration or duplication items to shop keeper/ Main Supplier/ Any Other.

**17) How was the response to your complaint?**

- 1) Satisfactory 2) Not Satisfactory

It is a bit good to listen 60% of people are satisfied with the response whereas 40% of people are not satisfied.



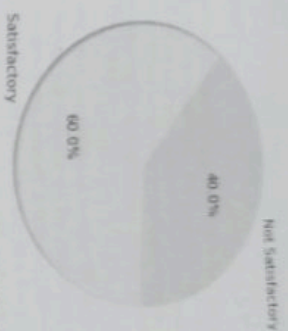


Figure 17. A chart showing percentage of people of satisfaction of response to the given complaint.

18) Are you aware of Consumer Rights Protection Act 2009?

1) Yes 2) No  
Unfortunately, only 2% of people had idea about consumer rights whereas 98% of people don't have any idea about consumer rights.



Figure 17. A chart showing percentage of people that are aware of Consumer Rights Protection Act 2009.

19) Have you ever filed a case in the consumer court?

1) Yes 2) No  
No one ever filed a case in the consumer court.

20) If yes, was the consumer court able to redress our grievance?

1) Yes 2) No

No one ever filed a case in the consumer court so there is no chance of redressing.

#### **8. Overall Findings**

It is quite amazing to listen that most of the people are stating that these days everything is getting adulterated but if we ask them did you see adulterated food, then their response is no. Most of the people don't have any idea about FSSAI, consumer rights. It is very much required to create awareness on food adulteration and its effects among them and must tell them their rights as a consumer. No one is using their rights at all.

#### **9. Limitation of the Study**

Because many people were not interested to take the survey, so a biding by the ethical issues and taking full consents of the consumers for the survey was a challenge. The consumers were handled generously, but sometimes it was time consuming for them to fill up the questionnaire. In a hurry, they might not be able to answer questions with full concentration. The study was performed in relatively a smaller number of samples that can only give an idea on consumer awareness, but not a full picture of consumer awareness due to time limitations.



5. no

PART C

Page . no

3.1.

RECOMMENDATIONS

3.2.

CONCLUSION

3.3.

REFERENCES

3.4.

LOG BOOK

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## PART - C

### RECOMMENDATIONS

- Government should make proper food laws and should be maintained well by the government and rigid testing procedures should be adopted for standardizing the food products.
- Low quality products should be completely eradicated by the government. One must receive severe punishment like high fine if they sell low quality products.
- Government must arrange food quality checking centers in each and every village. So that people can go there and check the quality of food. Government must maintain it well. The response of the officers must be comfortable for the users and vice versa. If they create any issue then must receive punishment.
- These days manufacturers are largely focusing on increasing the profit and they are not taking care about the wellbeing of the consumers. This attitude among the producers should be avoided and they work on the principles involving business ethics. It increases the demand of the products as well.
- It is mandatory that the wholesalers must choose quality products and stock them under clean and hygienic environments. Before buying and selling they must check the quality of products.
- Retailers should choose, purchase and sell the best quality product. As they are the closest channel to the consumers, they should take the initiative and must suggest them the best products.
- Consumers being the ultimate users of the food products should be fully aware of the adulteration practices that are prevalent among a large number of manufacturers. They should educate themselves with the standardizing techniques and select products with the AGMARK and FSSAI symbol.

### Conclusion:

After this survey we conclude that most of the people who are uneducated don't have any idea of checking MRP, Expiry dates on the product. So, there is a need of educating them with all these things. But it's not that easy to make it happen because even educated people also not checking all the details regularly. All the people need to be armed with lot of information and training on the issues of food adulteration and ways to raise their voice when felt cheated. It is the duty of every citizen to assist in curbing the menace of adulteration and take an active interest in exposing and condemning them. If they find anything that is getting adulterated then they must raise their voice against it. This reduces the chances of adulterating food which results in the healthy life of people.

### References:-

1. He Y, Bai X, Xiao Q, Liu F, Zhou L, Zhang C. Detection of adulteration in food based on nondestructive analysis techniques: A review. *Critical Reviews in Food Science and Nutrition*. 2020; 1–21. <https://doi.org/10.1080/10408398.2020.1777526>
2. Scheuring G. Preventive measures for food safety. In: McElhannon A, Marshall RJ, editors. *Food Safety*. Boston: Springer; 2007. 50–67. [https://doi.org/10.1007/978-0-387-33957-3\\_3](https://doi.org/10.1007/978-0-387-33957-3_3)
3. National Task Force on Food Safety. Bangladesh country paper. FAO/WHO Regional Conference on Food Safety for Asia and Pacific, Seremban; 2004 May 24–27.
4. Srikrishni B. Food Science. 3rd ed. New Delhi: New Age International; 2003:313.
5. Garman and Jones. Older American's knowledge of consumer rights and legal protection. *Journal of Consumer Studies and Home Economics*. 1992; 16:283–91. <https://doi.org/10.1111/j.1470-6431.1992.tb00518.x>
6. Rahman SM. Food safety: Bangladesh perspective and our responsibility. Food Safety Program. Dhaka: Institute of Public Health; 2006.
7. Roy P. Eating dangerously: watchdog's role mostly missing. *Daily Star* 2005 June 12–15:17. Available from: <http://archive.thedailystar.net/2005/06/17/d5061701044.htm>
8. Roy P. Toxic transformer oil used for frying food [Internet]. *Daily Star* 2006 Dec. Available from: <http://www.thedailystar.net/2006/12/29/d6122901085.htm>
9. FAO/WHO. Assuring food safety and quality: Guidelines for strengthening national food control systems. Rome: Food and Agriculture Organization. 2003; 28.
10. Roday S. Food hygiene and sanitation, Tata Mc Graw - Hill Publish in company Ltd., New Delhi; 2002. p. 248–9.
11. Ullah H. Adulterated food: Thoughts from an expatriate [Internet]. *Daily Star* 2005 Oct 21. Available from: <http://www.thedailystar.net/2005/10/21/d510211502102.htm>
12. Nasreen S, Ahmed T. Food adulteration and consumer awareness in Dhaka City, 1995–2011. *Journal of Health, Population and Nutrition*. 2014 Sep; 32(3):452–64.
13. Rao P, Bhat RV. A comparative study on the synthetic food colours usage in foods procured from urban and rural areas of Hyderabad. *Nutrition Food Science*. 2003; 33:23–4. <https://doi.org/10.1108/00346650310499758>
14. Rahman SM, Ismail ATKM. Strengthening official food safety control services [Internet]. Paper presented on Second FAO/WHO Global Forum for Food Safety Regulators, Bangkok, 2004 12–14 Oct. Rome: Food and Agriculture Organization. Available from: <ftp://ftp.fao.org/docrep/fao/meeting/008/ae335e.pdf>
15. Beniwal A, Khetarpaul N. Knowledge of consumers regarding the nature and extent of adulteration of Indian foods. *Nutrition and Health*. 1999; 13:153–60. <https://doi.org/10.1177/026010609901300303> PMID:10561864
16. Khair A. What we are eating. *Daily Ittefaq* 2005 Jun19–Nov



## 2. [Series report on food adulteration]

17. Nirmkar, A. Food buying practices of unemployed and employed home maker. *The Indian Journal of Home Science*. 1976;10(1).
18. Parule U. A study of ascertaining buying practices of consumable goods among low income group. Unpublished Master's Thesis, P.G. Department of Home Science S.P. University, Vallabh Vidyanagar.
19. Nath DK. Food or poison? *beheews24.com* [Internet]. 2014 May 9. Available from: <http://opinion.beheews24.com/2014/05/09/food-or-poison>
20. Mahfiz, M. 2014. Baro hat bathi-nusbech tero hat vejal [Internet]. *The Daily Anadar Shomoy*. 2014 Jul 2. Available from: <http://www.dainikamadershomoy.com/>
21. Kanruzzaman M. Fernalin Crime in Bangladesh: A case study. 2016; 39-44.
22. *The Daily Star*. 1 November 2009, Trader fined for selling fish treated with formalin [Internet]. <http://archive.thedailystar.net/new-Design/news-details.php?nid=103948>.
23. *The Daily Star* [Internet]. 2014 April 28. 40pc food poisonous. Available from: <https://www.thedailystar.net/40pc-food-poisonous-21921>
24. Ashfaq N, Masud T. Surveillance of artificial colours in different ready to eat foods. *Pakistan Journal of Nutrition*. 2002; 1:223-5. <https://doi.org/10.3923/pjn.2002.223.225>
25. Rahman Md, Sultan Z, Rahman MS, Rashid M. Food Adulteration: A serious public health concern in Bangladesh. *Bangladesh Pharmaceutical Journal*. 2015; 18(1):1-7. <https://doi.org/10.3329/bpj.v18i1.23503>
26. *The Daily Star*. 2011 July 28. Two puffed rice factories fined Tk. 1 lakh [Internet]. Available from: <http://archive.thedailystar.net/newDesign/newsdetails.php?nid=196107>.
27. *The Daily Star*. 2007 Jul 12 [Internet]. Adulterated ghee seized. Available from: <http://www.thedailystar.net/new-Design/news-details.php?nid=66453>.
28. Ashfaq N, Masud T. Surveillance of artificial colours in different ready to eat foods. *Pakistan Journal of Nutrition*. 2002; 1:223-5. <https://doi.org/10.3923/pjn.2002.223.225>
29. Babu S and Shenolikar IS. Health and Nutritional Implications of Food Colours. *Indian Journal of Medical Research*. 1995; 102:245-9.
30. *The Daily Star*. 2008 Dec 7. Ghee of 10 BSTI-certified brands found adulterated. Available from: <http://archive.thedailystar.net/newDesign/news-details.php?nid=66453>
31. Tiwari A, 2016 Volume: 2 | Issue: 5 | May 2016, international education and research journal.

Commissionerate of Collegiate Education, Government of Andhra Pradesh  
 Form - III Community Service Project (CSP) - Student Daily Progress Report

Name of the Student		Gadiboina Babu Naidu	
Roll No. of the Student		Y203099012	
Year		2022	
Program studying ( B.A/B.Com/B.Sc etc., )		B.Sc	
Program Combination		B.Z.C	
Name of the Mentor		Dr. K.V.S. Koteswara Rao	
Name of the CSP		AWARENESS PROGRAMME ON CONSUMER AWARENESS AND FOOD ADJUSTMENT	
Place of CSP execution		Gareusupalem	
S.No	Date	Work done	No. of hours spent
<b>FIRST WEEK</b>			
1	1-Jun-22	Socio - economic Survey on seven families	3
2	2-Jun-22	Socio - economic Survey on Eight families	3
3	3-Jun-22	Socio - economic Survey on seven families	3
4	4-Jun-22	Socio - economic Survey on seven families	3
5	5-Jun-22	Socio - economic Survey on seven families	3
6	6-Jun-22	Socio - economic Survey on seven families	3
7	7-Jun-22	Socio - economic Survey on seven families	3
<b>SECOND WEEK</b>			
8	8-Jun-22	Awareness programmes on Allergies	2
9	9-Jun-22	Awareness programmes on Polio and Drainage system	2
10	10-Jun-22	Awareness programmes on Congenital issues	2
11	11-Jun-22	created awareness about diseases caused by House flies	2
12	13-Jun-22	Awareness programme on Importance of construction Roads	2
13	14-Jun-22	Awareness programme on Consumer awareness	2

S.No	Date	Work done	No. of hours spent
THIRD WEEK			
14	15-Jun-22	Food adulteration Survey on seven families	3
15	16-Jun-22	Food adulteration Survey on seven families	3
16	17-Jun-22	Food adulteration Survey on seven families	3
17	18-Jun-22	Food adulteration Survey on seven families	3
18	20-Jun-22	Food adulteration Survey on seven families	3
19	21-Jun-22	Food adulteration Survey on seven families	3
20	22-Jun-22	Food adulteration Survey on eight families	3
FOURTH WEEK			
21	23-Jun-22	Report preparation	2
22	24-Jun-22	Report preparation	2
23	25-Jun-22	Report preparation	2
24	27-Jun-22	Report preparation	2
25	28-Jun-22	Report preparation	2
26	29-Jun-22	Report preparation	2

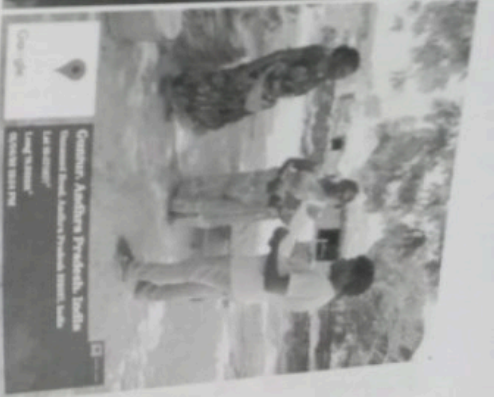
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K. V. S. (KVS.SC)  
Signature of the Mentor  
24/6/22





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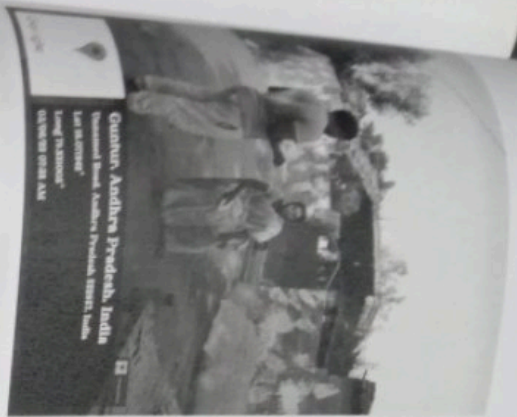
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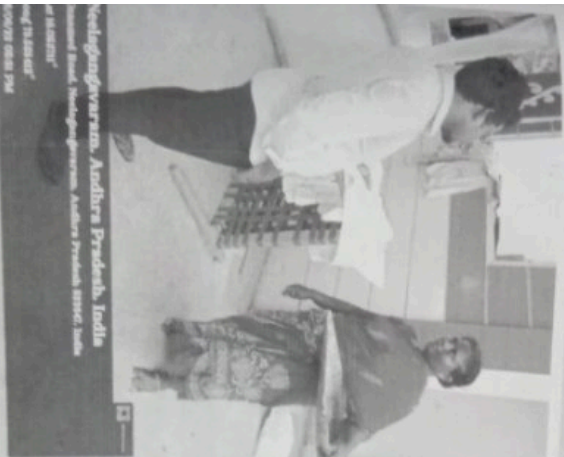
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