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A STUDY OF CONSUMER ATTITUDES TOWARDS FOOD ADULTERATION: A CASE OF FEW SELECTED FOOD ITEMS



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ABSTRACT

Consumers are the most vulnerable and exploited group all over the world, especially in developing countries. All individuals, men and women; young and old constitute consumers. Consumers are the largest economic group in any economy affecting and affected by almost every public and private decisions. But consumers are the only important group who are not effectively organized, whose views and voices are often not heard. In a developing country like India, the consumer is at special risk while taking market decisions.

KEYWORDS : Consumer Attitudes , Consumer Attitudes , economy affecting.

INTRODUCTION

Today, an average Indian consumer is mostly poor, ignorant, apathetic or just defeatist and continues to be at the receiving end. A recent study indicated that Indian consumers are cheated to the tune of Rs.20,000 million a year either by poor quality or less quantity or by overcharging the consumer (Bettadalli, 2006). A survey conducted by Consumer Guidance Society of India in collaboration with Health Department of Mumbai Municipal Corporation revealed that almost half of the samples of groundnut oil collected from various parts of the city were adulterated. Another report indicates that 20-50% of food stuffs sold in the market are attributed to the adulteration in edible oil (Bettadalli, 2009; 9).

According to a news article published in the year 2002, the *Times of India, Hyderabad*: "There might be iron filings in the sugar you eat, including through fair price shops all over the state", (Rao SC, 2002). In a shocking revelation, the Food & Drug Administration (FDA), Mumbai in 2002 has said that nearly 25% of milk produced in the state is adulterated (Naik, 2007). National Health Account 2004-05 shows that minimal of 0.3% International Classification of Health Accounts (ICHA) functions is spent on prevention of Food Adulteration though it leads to spectrum of diseases from minor health problems like diarrhea to serious problems like cancer, from curable to incurable diseases that can ruin one's life

style and life (Khapre, 2011).

The above studies clearly show that how consumers are easily cheated and exploited. Researchers are of the opinion that rampant adulteration is present not only due to the complex provisions of the Food Adulteration Act, 1954, but mainly due to consumers' indifferent attitude towards adulteration and the Act.

Khapre MP et al (2011) in their article *"Buying Practices and Prevalence of Adulteration in Selected Food Items in a Rural Area of Wardha District: A Cross-Sectional Study"* point out that adulteration is rampant in poor strata of society due to consumers' illiteracy and ignorance of their rights and responsibilities towards food adulteration. High incidence of food borne illness is found in families who consume adulterated food.

Leena Chitlange in her article *"To Study Awareness about Prevention of Food Adulteration Act, 1954 (PFA, 1954) among Working Women of Washim and their Attitude towards Seeking Legal Remedy in Case of Adulteration"* concluded that there was a very low awareness among women of Washim City regarding PFA-1954. They were not interested in seeking legal remedy as they were not enough aware of the aforesaid Act and its provisions.

UNIVERSE AND METHODOLOGY

Universe:

The study was conducted in Gulbarga Revenue Division consisting of Gulbarga, Bidar, Raichur, Bellary, Yadgiri and Koppal Districts. Consumers residing in district cities constituted the respondents.

Methodology:

The first question that the investigator encountered was to decide about size of the sample and method of selection. The respondents (consumers) in the universe – six districts were in several thousands. It was practically impossible for a research scholar, especially a lady, to go in for a large sample size and study. Also, it was impossible to select a proportionate and representative sample size. It was decided to adopt an 'ad hoc method'.

The investigator visited all the districts. Households from the poor and rich areas were approached. One respondent-consumer was selected for interview.

Sample Size and Selection

Keeping in view the limitations of time and resources, it was decided to take a sample size of 450 respondents from the six districts by random sampling method.

What is Food Adulteration?

To protect the health of the consumer, Government of India promulgated the Prevention of Food Adulteration Act (PFA Act) in 1954. According to this Act, the manufacture, sale and distribution of not only adulterated foods but also foods contaminated with toxicant and misbranded foods, is inhibited. According to this Act, an article of food shall be deemed to be adulterated:

- 1.If the article sold by a vendor is not of nature, substance or quality demanded by the purchaser;
- 2.If any inferior or cheaper substance has been substituted wholly or in part for the article so as to affect injuriously the nature, substance or quality thereof;
- 3.If any constituent of the article has wholly or in part been abstracted to as to affect injuriously the nature, substance or quality thereof;

- 4.If the article has been prepared, baked or kept under unsanitary conditions whereby it has become contaminated or injurious to health;
- 5.If the article consists wholly or in part of any filthy, putrid, disgusting, rotten, decomposed or diseased animal or vegetable substance or is insect-infested or is otherwise unfit for human consumption;
- 6.If the article is obtained from a diseased animal;
- 7.If the article contains any poisonous or deleterious substance which renders it injurious to health;
- 8.If the container of the article is composed, whether wholly or in part, of any poisonous or deleterious substance which renders contents injurious to health;
- 9.If any colouring matter other than that prescribed in respect thereof and in amount not within the prescribed limits of variability is present in article;
- 10.If the article contains any prohibited preservative or permitted preservative or permitted preservative in excess of the prescribed limits.

The meaning of food adulteration as understood in this paper:

Food is considered to be adulterated when some inferior substitute or sub-standard material is added to it. The adulteration may happen by adding of extraneous matter, subtracting the essential ingredient or misbranding the product to mislead the consumers about the quality, standards or other claims or non-compliances of standards, in order to generate the sale of the product.

According to WHO, food adulteration is defined as *“the intentional additional addition of non-permitted foreign matter”*. In addition, if it bears or contains any deleterious and poisonous substances which may render injury to health and if it is a raw agricultural commodity and bears or contains a pesticide, chemical which is unsafe, it is adulteration (The Daily Star, 2011).

MEANING OF CONSUMER

All of us are consumers of goods and services for the purpose of the Consumer Protection Act, the word “Consumer” has been defined separately for ‘goods’ and ‘services’.

Consumer is one who acquires goods or services for direct use or ownership rather than for re-sale or in production and manufacturing. For the purpose of ‘goods’ a consumer means a person belonging to the following categories:

- 1.One who buys or agrees to buy any goods for a consideration, which has been paid or promised or partly paid or partly promised or under any system of deferred payment
- 2.It includes any user of such goods other than the person who actually buys goods and such use is made with the approval of the purchaser.
- 3.A person is not a consumer if he/ she purchases for commercial or resale purposes. However, the word ‘commercial’ does not include use by consumer of goods bought and used by him exclusively for the purpose of earning his livelihood, by means of self-employment.
- 4.A consumer is one who hires or avails of any services for a consideration and such services are availed with the approval of such person.

The Webster’s New World Dictionary interprets the term in its economic sense, to define consumer as “A person who uses goods and/or services to satisfy his/ her needs rather than to resell them or produce other goods with them”.

REVIEW OF LITERATURE

S.N.Mahindru's (2012) book *"Food Safety: Concepts and Reality"* is perhaps the first attempt of its kind in which the issue of food adulteration scanned and analyzed, from the legal and technical angles making use of the abilities and agility acquired by him during a period of 50 years.

Rathore et al (2012) edited a book on *Consumer Awareness for Food and Dairy Products* shows how consumers are ignorant and indifferent about food adulteration.

G.Samsan and M.Sumathy (2012) edited a book on *Consumer Awareness, Welfare and Protection: Problems and Prospects*. The articles published in the book revealed that food adulteration varied according to consumers' level of awareness of the consumers right.

The investigation by Leena Chitlange (2014) is an humble attempt to check the status PFA, 1954 and create awareness among working women of Washim City. The objectives of the study were:

- 1.To check awareness regarding food adulteration among working women of Washim City.
- 2.To check awareness regarding prevention of Food Adulteration Act among working women of Washim City.
- 3.To check the attitude of working women towards seeking legal remedy in case of food adulteration, and,
- 4.To create awareness among working women of Washim City regarding prevention of Food Adulteration Act, 1954 and its provisions.

The above studies show that there is a need to undertake research on consumers' attitudes towards food adulteration.

OBJECTIVES OF THE PRESENT PAPER

The main objective of the paper is to study the attitudes of the consumers towards food adulteration. The specific objectives are:

- 1.To know the socioeconomic background of the respondents,
- 2.to know the attitudes of the respondents towards food adulteration,
- 3.To know the attitudes of the respondents towards loose and packaged food items sold in the market,
- 4.To know the attitudes of the respondents towards food adulteration in hotels/ inns and roadside eateries, and,
- 5.To know the attitudes of the respondents towards food adulteration in food items like oil, food grains and powders.

Measurement of the Incidence of Food Adulteration

An attempt was made to measure the incidence of food adulteration in the market by asking the simple question:

In your opinion, what is the percentage of food adulteration in the market?

Responses ranged between 30 per cent to 80 percent. Total scores are given below:

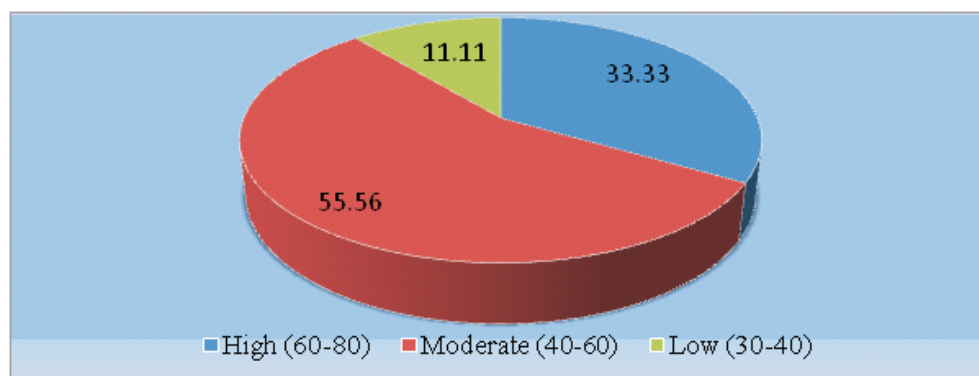
Table-1:
Measurement of incidence of food adulteration

| Sl. No. | Range of Percent | No. | Percent |
|---------|------------------|------------|---------------|
| 1. | High (60-80) | 150 | 33.33 |
| 2. | Moderate (40-60) | 250 | 55.56 |
| 3. | Low (30-40) | 50 | 11.11 |
| | Total | 450 | 100.00 |

Source: Filed Study

Data presented in Table-1 show that, 33.33 per cent of the respondents' markings ranged between 60-80 percents and 55.56 percent of the respondents ranged between 40-60. According to them, every item of the food is adulterated. They mentioned oily items like edible oil, ghee, dalda, etc. food grains, powders, etc. such respondents were considered high.

Figure-1:
Measurement of incidence of food adulteration



Those whose responses ranged between 40-60 per cents were categorized as moderate as they identified only a limited number of food items which are adulterated. Those whose markings ranged between 30-40 percents were considered 'low'. This category of the respondents had limited perspective of food adulteration. Most of them were indifferent and ignorant.

Respondents' Attitudes and Food Adulteration

1. Respondents have lower attitudes towards food adulteration – loose than packaged food items.
2. Respondents have lower attitudes towards food adulteration – road side eateries than hotels/ inns.
3. Respondents have lower attitude towards food adulteration with regard to oil and powder than food grains.

This section deals with the respondents' attitude towards food adulteration by studying three examples:

1. 1. Lose and
2. Packaged

2. 1.Oily items
2.Food grains, and powders and
3. 1.Hotels, inns, and
2.Road side eateries

1. Loose and Packaged Food Stuffs

It is generally believed that food stuffs sold in loose forms such as powders, oil, food grains are likely to be more adulterated than the same stuffs in packaged form. But there are no evidences to this affect. The Consumer Voice (2010 July) tested 13 brands of packaged and loose samples of whole wheat available flour in the Indian market and it has shown that most of the brands of whole wheat flour has no significant amount of pesticide residues. It means loose wheat-flour was not been adulterated compared to packaged one. A similar attempt was made to study the attitudes of the respondents towards loose and packaged items.

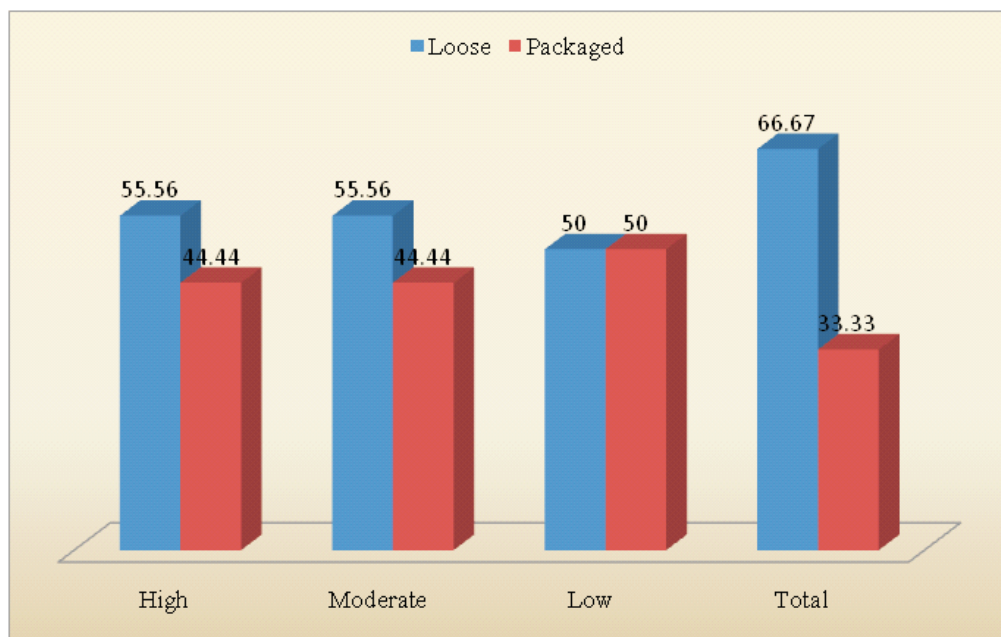
Table-2:
Respondents' Attitudes Towards Food Adulteration – Loose and Packaged

| Type of Food item | High | | Moderate | | Low | | Total | |
|-------------------|------------|---------------|------------|---------------|------------|---------------|------------|---------------|
| | No. | % | No. | % | No. | % | No. | % |
| Loose | 250 | 55.56 | 250 | 55.56 | 225 | 50.00 | 300 | 66.67 |
| Packaged | 200 | 44.44 | 200 | 44.44 | 225 | 50.00 | 150 | 33.33 |
| Total | 450 | 100.00 | 450 | 100.00 | 450 | 100.00 | 450 | 100.00 |

Source: Filed Study

Data presented in Table-2 show that a majority (55.56%) from high and moderate (44.44%) respondents said that loose food items are moderately adulterated than packaged. According to them, food stuffs sold in market openly (loose) can be easily adulterated. But there are those who argued that food adulterated could be done even in packaged items.

Figure-2
Respondents' Attitudes Towards Food Adulteration – Loose and Packaged



Consumer Voice (Sept. 2009) in an article “*Synthetic Milk: Slow Poison*” said that adulterated milk sold in market. A division bench of the Allahabad High Court issued directions to the Central Government for stopping open sale of synthetic and adulterated milk manufactured and sold in the open market in several states including Uttar Pradesh (Ibid).

In another article “*Milk: Our First Food*” *Consumer Voice* (Sept. 2011) brings out the hazards of loose and packet milk. It could be said that both loose and packaged food items are not free from adulteration.

Adulteration in Hotels/ Inns and Road Side Eateries

It is generally assumed that food adulteration is rampant in hotels, inns, restaurants, and dhabas on the one hand and road side eateries, on the other.

It may be pointed out that with the growth of urbanization, industrialization, educational institutions, public offices, there is a tremendous increase in the population which is compelled to eat outside home. Since three to four decades, a large number of hotels, inns have come into being to cater to the needs of the outside eating population. There are more outside eating population among students than among non-student population. Obviously, there is more scope for food adulteration today than before.

One can assume that there is more scope for food adulteration in hotels, inns, dhabas and road side eateries. Common people prefer to eat at road side eateries to hotels. The reason is food items are served at cheaper price compared to hotels and restaurants. The aim of this section is to know whether there are any significant differences in the attitudes of the respondents towards hotels/ inns and road side eateries. The hypothesis to be tested is: there are significant differences in the attitudes of the respondents towards hotels/ inns and road side eateries.

The reason is that respondents have lower attitudes towards food adulteration with regard to hotels/ inns compared to road side eateries. Hotels/ inns are attended by middle class consumers who

wish to have higher standards in quality, service, cleanliness, etc. Obviously, they do not want to lose their image and prestige among the consumers. But road side eateries have no sense of standards in quality, cleanliness, etc. Therefore, they are likely to engage in food adulteration.

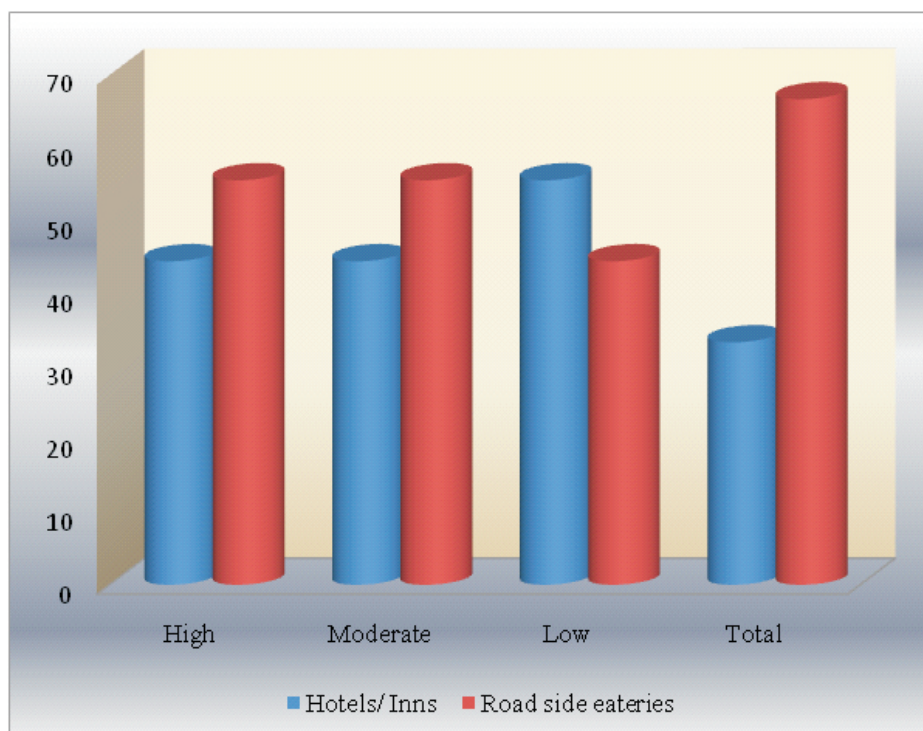
Table-3
Respondents' attitudes towards Adulteration: Hotels/ Inns & Road Side Eateries

| Places of food adulteration | High | | Moderate | | Low | | Total | |
|-----------------------------|------|--------|----------|--------|-----|--------|-------|--------|
| | No. | % | No. | % | No. | % | No. | % |
| Hotels/ Inns | 200 | 44.44 | 200 | 44.44 | 250 | 55.56 | 150 | 33.3 |
| Road side eateries | 250 | 55.56 | 250 | 55.56 | 200 | 44.44 | 300 | 66.7 |
| Total | 450 | 100.00 | 450 | 100.00 | 450 | 100.00 | 450 | 100.00 |

Source: Filed Study

Data presented in Table-3 show that the respondents have recorded high attitudes towards road side eateries in all the three columns viz., high (55.56%), moderate (55.56%) and low (44.44%).

Figure-3
Respondents' attitudes towards Adulteration: Hotels/ Inns & Road Side Eateries



Interestingly, the respondents have also marked higher percentages in high (44%) moderate (44%) and low (55%), towards hotels/inns.

It could be concluded that although there is relatively higher degree of food adulteration in road side eateries, enough food adulteration in hotels/ inns cannot be ruled out.

Respondents' attitude towards food adulteration – Oily stuffs, food grains, powders:

Food adulteration varies according to type of food stuffs. For example, oily stuffs are more vulnerable to food adulteration than food grains and powders. Normally, there is more scope for adulteration in oily stuffs than other food items. Data presented in Table-4 show that a majority (63%) of the respondents have marked high for oily items. But a majority (50%) of the moderate attituders marked food grains as accessible for adulteration. But, a majority (75%) of the low attituders have marked powders as accessible for adulteration.

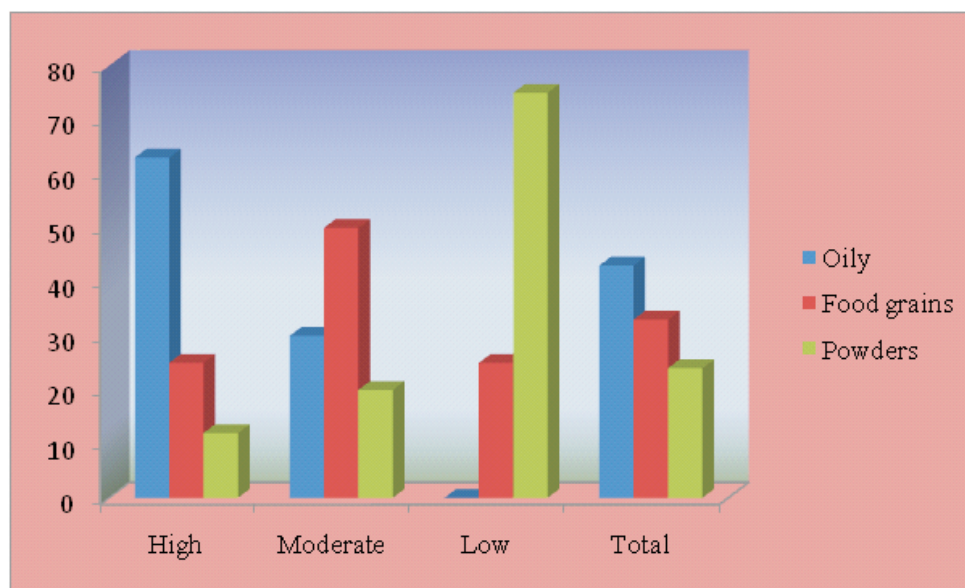
It could be concluded that edible oil is more accessible for food adulteration than food grains and powders.

Table-4:
Respondents' Attitudes towards type of Food Items: Oily, Food Grains and Powders

| Type of Food item | High | | Moderate | | Low | | Total | |
|-------------------|-------------|-------|-------------|-------|-------------|-------|-------|--------|
| | No. | % | No. | % | No. | % | No. | % |
| Oily | 250 | 63.00 | 150 | 30.00 | -- | -- | 650 | 43.00 |
| Food grains | 150 | 25.00 | 250 | 50.00 | 50 | 25.00 | 500 | 33.00 |
| Powders | 50 | 12.00 | 100 | 20.00 | 150 | 75.00 | 350 | 24.00 |
| Total | 450 (53) | 100 | 500 (33) | 100 | 200 (14) | 100 | 1500 | 100.00 |

Source: Filed Study

Figure-4
Respondents' Attitudes towards type of Food Items: Oily, Food Grains and Powders



MAJOR FINDINGS

Data presented in Table-4 show that oily stuffs are thought by the respondents to a higher degree (63%) of food adulteration, while food grains are considered to have moderate degree (50%) of adulteration. Interestingly, powders are supposed to be least (75%) vulnerable to food adulteration. According to the respondents:

1. A majority (63%) of the respondents have a higher attitude towards food adulteration in oily stuffs.
2. A majority (50%) of the respondents have moderate attitudes towards food adulteration with regard to food grains, and,
3. A majority (75%) of the respondents have lower attitude towards food adulteration in powders.

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