



## Problem of Food Adulteration: A Study in Jammu City

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**ABSTRACT:** This paper is an outcome of a study of the problem of food adulteration in Jammu city. The study is based on a review of various reports published in local newspapers, journals, magazines, and food blogs. The data has also been collected by serving questionnaires to people regarding consumer awareness towards the problem of food adulteration, its effects, methods of detection and the role of legal machinery in addressing the grievances.

**KEYWORDS:** Environment, Food, Adulteration, Jammu, City, Social Problem.

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### I. INTRODUCTION

This assumption would be correct that the problem of food adulteration started in ancient times and dates back to the advent of human social history. However, with the change in civilisations, this evil took different forms. Generally, adulteration may be intentional or incidental. Intentional food adulteration refers to the addition of intentional adulterants in food like sand, stones, chalk powder, water, mineral oil, harmful colours, etc. On the other hand, incidental food adulteration results from ignorance or the need for more facilities to maintain food quality. It may be caused by the spillover effect from pesticides and fertilisers, dropping of rodents, larvae in foods etc. Other types of food adulteration include physical, chemical, biological or microbiological and metallic contamination.

Thus, food adulteration has become the order of the day. The main reason behind food adulteration is economic gain, and just for a few monetary gains, the producers are playing with the life of people at the cost of their health, leading to their unnoticing slow death. There is adequate legislation in India to prevent food adulteration, but it still needs to be curbed. Even if ample statutes exist for preventing adulteration in food articles in India, the problem of food adulteration still exists. The problem is with implementing the laws and the corrupt practices by the authority concerned in not being strict while implementing these laws. Here, undoubtedly, the role of administrative machinery also remains in question. In addition, there is a need for consumer awareness. Everyone is responsible for ensuring the purity of the food being supplied and consumed from the producer to the level of consumption. Therefore, there needs to be more knowledge and awareness regarding the severity of food adulteration as a socio-economic problem, methods of detecting food adulteration and consumer redressal mechanism. Against this backdrop, studying the concept of food adulteration and its impact on human lives becomes essential. The researcher raises a few pertinent questions, like to what extent food adulteration exists in Jammu. The researcher also explores consumers' awareness of the problem of food adulteration, along with its effect on health and redressal mechanisms for consumer protection. It also aims to assess the legal mechanism's role in providing justice in the matters concerned.

### II. METHODOLOGY

The present study is both doctrinal as well as empirical. The sources of data collection include both primary as well as secondary data. In order to make sure the smooth collection of primary data, the researcher opted for an online questionnaire and face-to-face interview method. Secondary data included books, journals, research papers, articles, and other online materials. Further, the doctrinal part of the study is limited only to national and regional perspectives, i.e. Indian perspective and the law applicable in the state of J&K. The *Food Safety & Standards Act, 2006, Rules and Regulation, 2011* have been enforced in the State of Jammu & Kashmir with effect from August 5, 2011. With the enactment of said Act, the Prevention of Food Adulteration Act, 1954 and Rules, 1955, and various food-related laws and orders were repealed. So, analysis of the provisions of the Act is also one of the objectives of this study.

In contrast, the empirical study is limited only to the district Jammu of the state of Jammu and Kashmir. The respondents were randomly chosen out of the standard population in the district, primarily students, employees, shoppers, and householders. In addition, to determine the nature and magnitude of food

adulteration, interviews of some officials of the Office of the State Drugs Controller, Drugs & Food Control Organization, J&K, at Jammu were conducted. Through stratified-simple random sampling, every area member had an equal chance of being selected and being part of the study. Further, descriptive statistics were used to analyse the data, and narratives were used to present the data.

### **III. STUDY AREA AND THE STATEMENT OF THE PROBLEM**

Food Adulteration is a global issue, but how it has become a norm in Jammu city is fearsome (Singh, 1989). Jammu city is a municipal area within the Jammu district of Jammu and Kashmir (J&K), India. The problem in Jammu is that the food business operators and local vendors, including street hawkers, add harmful and injurious substances to the food, making it severely toxic. Primarily, adulteration exists in milk. Since it is a product of daily consumption in every household, in that case, in the presence of seriously dangerous chemical adulterants, let us not even consider water an adulterant. These adulterants are mixed in milk also to cheat the lactometer readings in the first place. Then, “besides water, other substances like flour and starch are added to maintain milk’s viscosity. The final mixture, which looks like milk, is a concoction of harmful agents such as caustic soda, urea, conventional detergents, and refined oil. These ingredients present in milk cause gastrointestinal complications and can damage the intestinal tract and digestive system.”

Moreover, then we wonder why life-threatening diseases are rising in the state. As per the census reports of 2011, published in *Greater Kashmir* (2018), the Food Safety and Standards Authority of India (FSSAI) found that out of the total 1791 samples of milk, 1226 samples were either diluted with water or mixed with harmful detergents. As per *Kashmir Observer’s* report (2013), 83% of milk produced and consumed in J&K is contaminated.

### **IV. DATA ANALYSIS AND FINDINGS**

The online survey brought the intended information from the public. The questionnaire comprised 30 questions covering the people’s preferences regarding the type of food they like to buy, behaviour towards purchased food, the know-how of the food adulteration term and its effects, including methods of detecting food adulteration and awareness about legal machinery to redress grievances. The collected responses were clubbed into six categories to make analysis easy and presentable systematically. The survey was conducted having insight into consumer awareness towards the problem of food adulteration and the on-ground implementation of the law dealing with food adulteration. One hundred ten respondents took their part in the survey, including men (43.1%), women (39.2%), and transgender (1%). Respondents included people from almost every pocket of the city. They belonged to different age groups varying from 15 years to 65 years of age. It is, thus, quite fascinating to know that respondents as younger as 15 years of age knew and had knowledge about the existence of food adulteration in society. Both illiterates (through interviews) and literates (online and face-to-face) participated in the survey. Respondents included people from different social classes ranging from business class and labourers to students, including people specialising in law, engineering, medicine, management studies, government employees, journalists, and ordinary householders.

The majority of the respondents, i.e. 47.6%, usually liked traditional food as against an aggregate 52.4% who liked fast food (30.1%) and ordinary food (22.3%) respectively. Among these people, a majority of 46.6% preferred branded food against the minimum percentage of 20.4% who preferred to buy loose food and 33% of the people preferred to buy packaged food. It implies that people believe in the brands and packaged items to be less or not adulterated. However, the majority of 63.4% of people get attracted by the appearance of the articles and are, therefore, susceptible to becoming victims of food fraud.

A good majority of the respondents (86.3%) examine the product to be sure of its absence of any foreign substance injurious to health. Further, 81% of people can identify misbranded items against 19% of people. Most people (89.2%) do not prefer to buy goods from unhygienic places. The majority of the respondents, i.e. 71.8 %, check the labelling of ingredients, nutrition, and expiry date of packaged food against 3.9% of people who do not prefer to check and 24.3% of people who check only at times. It implies that people are generally concerned about their health and hygiene and do not want to become victims of food fraud. However, the majority of people (81.6%) among these do not happen to cross-check the weights of the products mentioned on the items against 18.4% of people. However, at the same time, most people (96.1%) check the maximum retail price (MRP) before buying the product. Among these, the majority of people, i.e. 74.8%, as against 25.2%, cross-check the prices of products from alternate sources. It shows that people are conscious of their expenses and money spent on specific items. They also trust the sellers in giving them the correct quantity of product so far as the weights of products are concerned.

Concerning the know-how of the term ‘food adulteration’, the majority of the respondents, i.e. 95.1%, as against 4.9%, are aware of the term food adulteration. Among these people, 99% believe food adulteration takes place in society. Furthermore, most people believe that food adulteration takes place mainly at the manufacturing stage (40.6%), followed by storing stage (8.9%), and packaging (5.9%), respectively. Also, with

an increasing number of restaurants in society, the majority of 56% of people believe that food adulteration takes place in restaurants mostly. Regarding their awareness towards the effects of food adulteration, 74.3% of respondents, as against 25.7%, are aware of the effects of food adulteration, including food poisoning, stomach disorders, liver and kidney malfunctions, brain damage, paralysis, cancer and even death. Also, 87% of people know that dangerous dyes and other toxic substances in food can lead to diseases like cancer and even death. Therefore, it implies that consumers are cautious about what effects food adulteration may have and what food they should consume.

Moreover, concerning consumers' awareness towards methods of detecting adulteration in food, 86.1%, as against 13.9%, are unfamiliar with *Detect Adulteration with Rapid Test (DART)* - a manual booklet for quick detection of adulteration of several food items released by the FSSAI. On asking whether respondents know of the redressal mechanism (available under law), 58%, as against 42% of people, have encountered incidents of food adulteration and duplicate items. However, only 13.6% of people, as against 86.4% among these, complained to the shopkeeper. The respondents shared a divided opinion regarding the awareness of the legal mechanism for punishing food adulterators. However, 50.5% of people are aware of the existence of such a mechanism. It implies that even though people know about the severity of the problem of food adulteration, they take such incidents lightly and do not choose to complain. It can also be, therefore, concluded that food adulteration cases usually go unreported. Also, the majority of 96% of people believe that food adulteration occurs but gets highlighted rarely.

Further, 62.2% of respondents had witnessed a family member suffering from illness or food poisoning due to food adulteration in their family. However, only 4.7%, as against 95.3% of people among these, chose to file a complaint with the relevant authority. Besides the lack of awareness (27.2%) of the available legal mechanism, the reasons that most of the respondents cited for not approaching the legal machinery against the menace of food adulteration included; the role of corruption (100%), complex and time-consuming legal process (35.06%), non-seriousness of people (6.4%), lack of government policies or schemes, and poor response of officials (22%).

## **V. SOME EXPERIENCES AND CHALLENGES**

To calculate the magnitude of food adulteration in Jammu city, the researcher decided to enquire from the government officials at the Office of the State Drugs Controller, Drugs & Food Control Organization, to provide the data available for the same. Nevertheless, the officials responded coldly and did not pay any heed in even filling out the questionnaires served to them. Meanwhile, the researcher managed to ask a few questions to the officials, to which the responses concluded that the department does not believe that food adulteration is on the rise in society. Further, they believe that the main hurdle in implementing the law is the lapse in infrastructural facilities, a considerable volume of the subject to be taken care of since 40% of income almost in every household is spent on eatables. Moreover, the officials perceive the law as not fitting for the present society, where thousands of people produce and sell substandard goods and eatables. Moreover, the action will yield thousands of prosecutions for which they need more human resources in adjudicating agencies. Further, it was suggested by a few officers that the number of field workers (on the ground level) should be increased in proportionate to the population of a particular area allotted to them; otherwise, they are continuously overloaded with work.

## **VI. CONCLUSION AND SUGGESTIONS**

It can be concluded from the study that most people are concerned about their health and hygiene and behave rationally while purchasing goods, and are also aware of the term food adulteration and its effects on health. However, most people need to learn about methods of food adulteration detection and are unaware of the legal mechanism available under the law. Even if most people had witnessed food poisoning and other foodborne diseases, only a few filed a complaint with the relevant authority. It, thus, partly disproves the common belief that consumers are not aware of food adulteration as a socio-economic problem and its effects and partly agrees with the concern that consumers lack awareness about the methods of detection of food adulteration and redressal mechanism under the law.

The researcher would like to make a few suggestions to deal more efficiently with the problem. Following are some general suggestions:

1. In the first place, there is an urgent need to spread consumer legal literacy and awareness among the ordinary consumers of the country about their responsibilities and rights.
2. All enforcement machinery under different consumer legislation has to be strengthened. They must be provided with the required tools, equipment, and gadgets to detect adulteration rapidly and accurately.
3. The central and state governments have to provide adequate funds for providing the necessary infrastructure to implement the objectives of the *Food Safety and Standards Act* in letter and spirit. For example, sufficient

trained staff, stenographer, computer and internet facility, library and accommodation. It is necessary to have efficient well-coordinated executive machinery to wipe out the adulterators and evils of adulteration.

4. Provide more funds to voluntary organisations and legal services.

5. More publicity should be given to the existence of the redressal machinery since most people need to learn that they have such a forum for the redressal of grievances. Press, Radio, and T.V. media could be used extensively to publicise consumer rights and remedies.

6. The consumer should not just remain silent after getting compensation. They must publicise among their friends and, if possible, in mass media so that the other sellers are cautioned, and consumers are educated. A well-informed consumer is the foundation of a healthy consumer society.

7. The government should introduce consumer education in the curricula of schools and colleges.

8. More well-equipped laboratories should be set up in every district of every state in the country. It is essential if the war on adulteration is to be combated. Well-equipped laboratories with efficient and competent staff will undoubtedly be of great help in the eradication of the evil of adulteration.

Furthermore, there are some specific suggestions in relation to the law as well:

1. The offences under sections 272 to 276 of the Indian Penal Code (IPC), 1860, which deal with adulterated food articles and spurious drugs, shall be made cognisable and non-bailable with stringent punishments and enhanced fines.

2. The *mens-rea* or guilty knowledge should not be essential to convict the accused under sections 272 to 276 of the IPC. It should not be necessary to prove that the food is noxious. What needs to be established is that it is adulterated, howsoever small the measure or extent of adulteration may be.

3. To properly function and implement the objectives of the *Food Safety and Standards Act* 2006, it is necessary to have more food inspectors in districts and at the tehsil level. Therefore, the scope of the duties of the food inspectors should be widened and incorporated into the Act. The Rules are made thereunder to check the malpractices of food adulteration and to give complete protection to consumers who help the government machinery detect adulteration mid adulterators in the more considerable social interest.

4. The food inspectors are discharging the work of detection, prosecution, handling, and conducting all cases. It is too much work affecting their professional competence. Therefore, the handling and conduct of the cases must be transferred to other agencies such as police or public prosecutors. It will help not only the food inspectors but also the people willing to help solve the menace of food adulteration.

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