

An Assessment on Economic Adulteration of Food Products; Case of Dessie Town, Ethiopia

Yohannis Gebremariam Hailie

Lecturer, Department of Business & Economics,
Wollo University, Dessie, Ethiopia

Abstract

Food is essential for sustenance of life. Adulteration of food cheats the consumer and can pose serious risk to health in some cases. The present study was planned with the main objective of identifying buying practices of consumers and their extent of awareness related to selected food products. Stratified sampling method with questionnaire and interview schedule was adopted to collect data. Tool was standardized by difficulty index, validity index and split half reliability method. Statistical test such as chi-square between awareness and occupation, t-test among age group, educational level and extent of awareness were carried out. Study revealed that respondent's awareness related to rights and responsibilities was good but poor related to food adulteration. Education, family income and occupation had an effect on extent of awareness. Age and awareness has no correlation while a positive correlation was found between family income and awareness. This research paper is the part of the work carried out under the project funded by Wollo University, Dessie, Ethiopia.

Key words: Food adulteration, adulterants, adulteration detection

Review of literature

1. The economic adulteration of food products means illicit profits, unfair competition, consumer fraud etc, for financial gain or competitive advantage. It is true that, adulteration primarily thrives in a period of shortages. The consumer's real income is falling due to rising prices of even essential commodities. Psychologically, consumers pay less attention to the quality of products during this period (Thirupathi, 2008).

2. Consumers used food handling errors such as giving prior to tasty food and like to purchase it from stockiest, healthy choice in food comes next. It has significant negative impact on the ultimate consumers of the product and it is so opposite to the concept of consumerism (Wilm, 2010).

3. Consumer's best defense is knowledge of his/her rights as a consumer and of the remedies which exist to resolve these problems when they occur. Knowledge and awareness about adulterated foods, laws and its rights related to adulterated food is crucial in a society where technology heightens opportunities for perpetrators of fraud deception and misrepresentation (Garman and Jonest, 1992).

4. Food adulteration takes many forms: mixing, substitution, abstraction, concealing the quality sale of decomposed foods and using false labels. Somehow, the Indian consumer has become accustomed to live with adulteration. Even educated consumers do not pay attention to the menace of adulteration (Sundaram, 2009).

5. There is an old saying that the

consumer is a king, but in truth, he/she had been a victim of exploitation such as the abuse/maltreatment in consumer goods, rampant/uncontrolled adulteration, unabashed/shameless substitutes and supplies by the trading community. Therefore, it is perhaps commonest of all consumer woes/sadness (Solanki, 2012).

6. **Statement of the problem**

The demand for food has also increased in our country Ethiopia as well as in Dessie town. This shortage of food and ignorance of consumers by unscrupulous traders forced consumers to run from pillars to pillars to get a foodstuff which is not adulterated. But, they pay heavily for consuming adulterated food not aware of its hazards. If the consumer knows the ways and means to check the commodities of daily use, they can save themselves and their families from this mind-boggling problem (Solanki, 2012). And also most researches done on adulteration focused on its impact of health by ignoring the effect of adulteration on business market and it is not done in Dessie town. Therefore, the researcher wants to assess the effect of economic adulteration on market competition, product quality as well as consumers' awareness about adulteration by addressing the following research objectives:

Research Objectives

1. What are the ways and means help to create awareness about adulteration on food products?
2. What is the effect of adulteration on market competition as well as the society?
3. To what extent do consumers aware of adulteration?

Scope of the study

The study was delimited to adulteration of honey and milk and its effect on market competition related to price, quality and consumers' awareness (to buy or not to buy such adulterated products) on it. The study also bordered to the focus areas of Robit, Salaysh, Arada and Menafesha Sub cities of Dessie users and food traders.

Significance of the study

Knowing the risk factors at each phase of the supply chain will help to put in place an effective and comprehensive quality system and the study is worth doing because

- ✓ It is useful for the fulfillment of providing important information for consumers and quality agencies about food adulteration practices.
- ✓ It will help to protect the health and welfare of the consumers and the marketers against dishonest and unfair competition if there is enough information about tendency of food adulteration
- ✓ It will provide significant knowledge (awareness) to the consumers about food adulteration.
- ✓ It will help to create responsible citizens in the city.
- ✓ It will provide information about the drawback of the practices to the concerned company bodies and forwards some possible solution.
- ✓ Other stakeholders who need knowledge about inventory management system will use this Research paper as a reference.
- ✓ The study findings will be useful for future researchers who would study a similar topic as they will use it as literature review, etc.

Research Methodology

Research Design

For this research paper, a descriptive study was chosen as the most appropriate research strategy.

Sample size

The population of this study was equal to infinite food consumers and 35 food traders (the number of consumers in Dessie Town). The information/data pertaining to this topic was collected from 437 samples by using infinite population formula which was developed by Bill Godden, January 2004.

$$n_1 = \frac{z^2 \times (p) \times (1-p)}{e^2} = \frac{3.8416 \times (0.5) \times (0.5)}{0.0025} = 385$$

$$n_2 = \frac{n_1}{((n_1 - 1)/N) + 1} = \frac{385}{((385 - 1)/35) + 1} = 30$$

Therefore, the total sample size = 415

Where, n_1 = sample size for consumers

n_2 = sample size for food traders

P = expected standard deviation and $q = 1 - p$

N = Size of population for food traders Z = z-value of the confidence level which is 95%

e = margin of error or level of significance (c)

Sampling technique

A probabilistic, namely stratified sampling and simple random sampling methods were applied.

Method of Data Analysis and Management

To analyze and interpret the data collected, and to drive a conclusion from the study through qualitative and quantitative techniques such as:

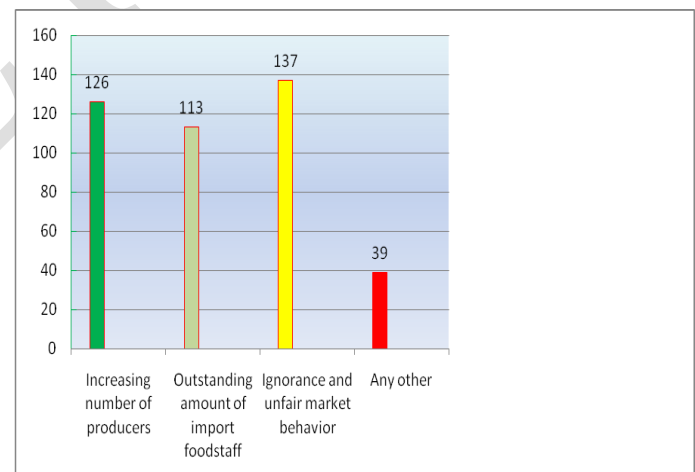
- a. Tabulation
- c. Percentage
- c. Charts and graphic statistical measures were applied

Presentation, discussion, Interpretation and Analysis of Findings

Background information:

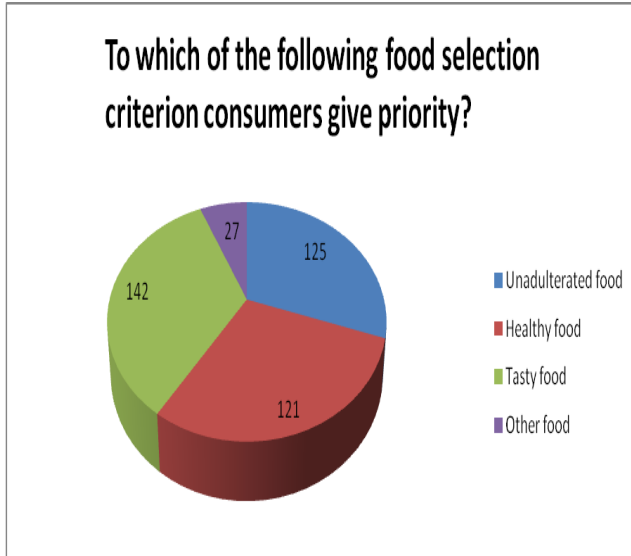
The result revealed that from the selected sample size, 1/3rd of respondents (33.5%) were from the age group of (20-35), 28.9%, 19.5%, 18.1% were from age (13-20 years), (36-50 years) and above 50 years respectively. Likewise, 28% of respondents were educated up to higher secondary. Majority of the respondents i.e., 70% were homemakers, while self employed and professionals were very less i.e., almost 2% and this study investigated on Economic Adulteration of Food Products in Case of Dessie Town and the findings are tabulated in the subsequent tables and diagrams as follow:

Picture: Factors that mislead firms to cheat consumers



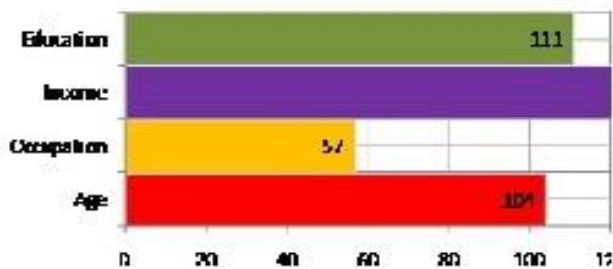
As the data shown on the above picture indicates, 137 respondents stated that ignorance and unfair market behavior is the main factor of misleading firms to cheat consumers. 126 respondents and 113 respondents responded as an increasing number of producers and outstanding amount of import foodstuff are factors that mislead firms to cheat consumers respectively. The remaining 39

respondents stated that there are other factors that mislead firms to cheat consumers.



As the above diagram indicates, 142 (34.2%); 125 (30.1%) and 121 (29.2%) respondents stated their food-selection-criterion as Tasty food; Unadulterated food and Healthy food respectively. The remaining 27 (6.5%) respondents stated their response as other food selection criterion. This implies that more of the consumers give priority for Tasty foods.

which factor has more effect on the of consumers' awareness about adulteration?



Regarding consumers' awareness about adulteration, the result revealed that income of consumers has more effect on the extent of consumers' awareness which weighs 34.5% from the total 415 respondents. As the diagram

indicates, occupation has less effect on extent of consumers' awareness about adulteration which weighs 13.7%. The remaining 104 and 111 respondents stated that consumers' age and level of education have effect on the extent of their awareness about adulteration respectively.

Findings:

Basing on the findings, after the researcher observed the overall feedback of the respondents wisely, the following conclusions were forwarded. The urban people of Dessie where people in majority are Muslims, the young people are there in majority and linked with mostly buying of food materials not directly linked with handling of food materials but like tasty food, healthy choice in food comes next.

According to the majority of the respondents' response, the income of consumers in Dessie Town has more effect on the extent of consumers' awareness than their age and occupation.

The main factor that misleads firms to cheat consumers in Dessie town is ignorance and unfair market behavior. Sometimes, the increasing number of producers; the outstanding amount of import foodstuff and other hidden factors mislead firms to cheat consumers.

Lastly, from the above findings and discussions, we can conclude that the adulteration which mixes in the food items can cause tremendous effect on health without our knowledge. This can be prevented by few alerting steps of our society.

The government should make a check on hike of price. Selection of wholesome and non-adulterated food is essential for daily life to make sure that such foods do not cause any health hazard. Government bodies should inspect food quality of both the brands and local stores. Government should aware people about adulteration in food and there adverse effects.

However, visual examination of the food before purchase makes sure to ensure absence of insects, visual fungus, foreign matters, etc.

Consumers should be able to judge what is good and what is not. The consumer should avoid taking food from an unhygienic place and food being prepared under unhygienic conditions. Label declaration on packed food is very important for knowing the ingredients and nutritional value. Expiry dates should be checked prior to buy something. Avoid low quality local grocery food item just to save few penny. Buy the item with a proper bar code billing. Inform and complain to the consumer forums about the shops if such deleterious adulterants would found in food items. Business oriented people just forgot the humanity in behind of money making mentality. The above general consciousnesses are very easy to initiate for our healthy life. If we actively take part in changes at least for our own concern then we bring about a healthy and non hazardous future for our forth coming offspring.

The consumers should give priority to their health; tasty choice in food should come next. The responsible body should give training to consumers about adulteration that helps them to be aware of its effect on their life cycle. The consumers should be aware of where there are adulterants that may create unfair market behavior and tries to cheat. And consumers should also give attention to the hidden factors that may create health menace.

References:

1. Aguilera. (1999), Marketing management, 6th Edn, Prentice- Hall of India Private Limited, New Delhi, pp: 196- 201.
2. Eckels et al. (2001), Marketing in Practice: “The Changing Faces of Marketing”, Macmillan; Press, London, 431-441.
3. Garman and Jonest, (1992). Purchased by homemakers. 8: 660- 667
4. Sundaram, (1985), Empirical Study of the demand for honey, in Estimated Impacts of Economic Adulteration on the U.S. Honey Industry, unpublished research report authored by Gray F. for the National Honey Board, August, 1999
5. Thirupathi. (2006), Extent of awareness and food adulteration detection in selected food items
6. *Vlasta Pilizota, Ph.D. (2003)*. Food additives – consumer’s view point, Indian Food Industry, 9; 14–19
7. Wilm. (2003), The Long fight for pure foods, in marketing; the Yearbook of Agriculture, Government Printing Office, 1954, pp. 211-220.