

Handling Perishable Food Stuff for Quality Assurance and its Effect on Quality and Price a Study of Yanlemo Market, Kumbotso L.G.A of Kano State

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Abstract

The purpose of this research work is to find out how perishable food stuffs are handled in Yanlemo market and its effect on quality and price of commodity. Questionnaires were administered to 50 randomly sampled traders about handling of perishable stuff during transportation, cleanliness, display, storage, how it affects quality and price and the problems associated with the its handling. The study revealed that there is little or no knowledge on proper handling since 75% of the respondents are within the range of non formal to O'level of education. More than 75% displayed their items outside shops which attract dust, air, sunlight, flies and other climatic conditions. While they realized that quality of their item is the main factor that stimulate customers and that poor handling depreciate the value of the item, 40% of the respondents suggested that for effective quality assurance in the business of perishable items cooperative efforts of 40% and Government role of 30% should be involved.

Keywords: Food, Quality assurance, Yanlemo Market, Kano State

Introduction

Health is wealth and pre-requisite for development. Nutrition is a process of receiving food necessary for growth and healthy, food is an edible substance that nourishes the body, and after its digestion and absorption it support life and promote growth. Food is classified into: carbohydrates, proteins, fats and oil, vitamins, mineral salts, and water.

According to Thareja (2007), "Quality assurance refers to the planned and systematic activities implemented in a quality system so that quality requirement for a product or services will be fulfilled through systematic measurement comparison with a standard monitoring of processes and associated feedback loop that confers error prevention for survey to identify strength and weakness, monitoring, competition, standard compliance and evaluation. It also involves documentation, use of technical infrastructure, time to time checking, audit trail, research information from others with experience then share effective policy and competition."

Reilly (2003) stated that carbohydrates supply energy and obtained in cereals, tubers, etc, protein is responsible for promoting growth, body building, assist in repair body tissues, transmission of hereditary characteristics, produces enzymes and antibodies, obtained from meat, fish, milk and so on, while fats and oil supply heat and energy present in groundnut oil, olive oil, palm oil etc, vitamins and mineral salts for carrying out various body process and protection against diseases found in fruits, vegetables, seed, nuts, and so on.

Perishable food composed high moisture thus make them prone to deteriorate almost immediately unless properly handled. Example fish, meat, sea foods, fruits as banana, pawpaw,

mango, pineapple, etc. vegetable as spinach cabbage, lettuce, etc. all these require accurate temperature, controlled humidity, air circulation and sanitary storage space, failure to this, can lead to deterioration or eventual loss.

Hobbs & Roberts (2009) defined "Food handling as a process of regarded as open food operations with appropriate care and attention, it involve personal hygiene, cleaning methods, clean containers, pre-packed grocery, sales, temperature and storage. Perishable food perpetuate poor handling in three stages:- production stage, poor agricultural practices, like irrigation with stagnant and contaminated water, farm pest and diseases, dirty tools free and extensive rearing, unsanitary slaughtering places etc. These favour spread of harmful bacteria and worms. The marketing stage that denote poor transportation exposure to sunlight, use of unventilated containers etc. Which attract flies, bacteria, fungi, etc. and preparation state. According to Reilly (2003) "most nutritive values of perishable food are loss through bad choice, bad methods of cooking over steeping, during cleaning, destroy gravies and storage at ambient temperature.

Poorly handled food especially perishable items are deficient to some nutritive values or harbour pathogenic bacteria and render it harmful even if it is acceptable to the eye. For instance exposure to sunlight destroyed Vitamin C, A and reduced Vitamin D. Over steeping destroyed Vitamin A, C, Niacin and folic acid. Exposure to dust and flies caused infection, food borne diseases, as vomiting diarrhea, etc. and free rearing system could lead to infection as typhoid fever, tape worm, etc. These encouraged this study to find out the activities carried out in market that could affect perishable food stuff for the purpose of enlightening traders on how best to handle perishable food for proper health and National development.

Objectives of the Study

The objectives of this study are as follows:-

- To find out how perishable food stuff are handled by retailers and marketers.
- To identify the effects of handling perishable food on its quality.
- To identify the relationship between handling of perishable food and their price.
- To determine the best methods of producing quality assurance in business of perishable food.

Research Questions

- How perishable are foods transported from producers to marketers?
- What methods do marketers use to clean perishable food?
- In which places do marketers store their unfinished perishable food stuff?
- Where and how do marketers display their perishable food stuff for sale?
- What could be the problems associated with buying and selling of perishable food items?
- What stimulate customers during purchase of perishable item?
- Can the problem associated to the business interfere with the price of perishable items?
- What factors determine the price of perishable item?
- What opinion do marketers have that can improve the quality assurance of perishable item business?
- What effort can individual marketers offer that will boost the marketing of perishable food item?

Hypothesis

1. Ho: There is no significant difference between handling of perishable item and its quality.
2. Ho: There is no significant difference between quality of perishable item and its price.

Methodology

The research designed was descriptive survey.

Area of the Study

The study area was Yanlemo market located at Maikalwa Quarters of Zaria Road Kano. It is quite a popular place for the wholesale of fruits like oranges, bananas, watermelon etc. Other consumable commodities are also available. The commodities are brought to the market for sale from other places by local producers.

Population and Sampling Procedures

The target population were marketers of perishable food business transactions in Yanlemo market in which 50 people were sampled randomly, the return is 100% because the researcher used oral interview.

Instrumentation

The data was collected by the use of a set questionnaire captioned QAHPF, consisted of 15 questions of choice the appropriate answer among the options provided.

Validity and reliability of instrument:

The questionnaire was screened and vetted by a Senior Lecturer in the Faculty of Education of the Ahmadu Bello University Zaria.

Result: General Profile of the Sampled Respondents

Out of the 50 sampled respondents 31 (62%) were within the age range of 30 – 40 years, 13 (26%) within 20-29 years, and 6 (12%) above 40 years and none under 20 years. While 24 (48%) received secondary education, 14 (28%) primary education 12% non-formal Education 6 (12%) tertiary education and no graduate. 56 (92%) are male and 4 (8%) are female respondents.

Table 1: Means of Transporting Perishable Item to the Market

Responses	Frequency	Percentage
On motorcycle	20	40
On pick up and trucks	19	38
On animals	0	0
In vans	2	4
On cars	9	18
Total N = 50	-	100

Table 2: Methods of Cleaning Perishable Items

Responses	Frequency	Percentage
Soaked in large containers	10	20
Wash directly with tap water	0	0
Not cleaned at all	30	60
Use of detergent and other chemicals	10	20
Total N = 50	-	100

Table 3: Methods of storing perishable food

Responses	Frequency	Percentage
Parked in bag and kept open	23	46
Parked and kept open	8	16
Use of natural substances	4	8
Thatched in open place	5	10
In stores	5	10
Use of artificial substances	-	-
Rentage in marketers store	-	-
Refrigerator	5	10
Total N = 50		100

Table 4: How they displayed perishable food for sale

Responses	Frequency	Percentage
Shops	3	6
Hawking	6	12
Outside shop	26	52
Under thatched roof	15	30
Total N = 50		100

Table 5: Problems associated to handling business of perishable item

Responses	Frequency	Percentage
Attack by bird, insects and rodents	15	30
Storage facilities	12	24
Transportation	11	22
Weather problem	12	24
Total N = 50		100

Table 6: Factors that stimulate customers

Responses	Frequency	Percentage
Neatness: personal hygiene, equipment and place.	15	30
Discount prices	11	22
Quality of the item	19	38
Advertisement	5	10
Total N = 50		100

Table 7: Factors that depreciate the value of perishable item

Responses	Frequency	Percentage
Discoloration/faded	15	30
Wilted	10	20
Odour	15	30
Dryness	10	20
Total N = 50		100

Table 8: The treatments to the spoilt perishable food

Responses	Frequency	Percentage
Sell at cheap price	20	40
Throw away	15	30
Give out to children and beggars	10	20
Used at home	5	10
Total N = 50		100

Table 9: Factors to improved quality assurance in perishable food business.

Responses	Frequency	Percentage
Government assistance	15	30
Cooperative society	20	40
Non-governmental organizations	5	10
Personal hygiene	10	20
Total N = 50		100

Table 10: Individual efforts for boosting perishable item business

Responses	Frequency	Percentage
Personal hygiene	15	30
Cleanliness of market place	6	12
Cleanliness of the item	20	40
Use of uniform, gloves, and so on	8	16
Total N = 50		100

Discussion

The data obtained show various handling activities that affect the quality and price of perishable food stuff. Table 1: revealed that 40% of the perishable food traders transported with motorcycle and pick-ups in the absence of vans which exposed the items to dust, air, sunlight, rain or even pressure by the human activities because it is observed that people laid on the main food stuff on the pick ups and trucks, therefore 70% of the data collected revealed poor transportation of perishable item.

The cleaning of perishable food is also not encouraging because 60% of respondents stated that they do not clean their items at all and those that clean them soaked them. Reilly (2009) stated that over soaking destroy most nutrient content. 20% used detergent to clean oranges which is also hazardous to health.

Table 3 showed the absence of good storage facilities while table 4 revealed the process of displaying perishable item for sale of which more than 90% of are done in the open, outside shops. Based on this, there are various problems associated with handling of perishable food since the percentages of responses are within the same range of percentile that is 22 – 30%. Table 6 and 7 indicated the significant relationship between handling of perishables and its quality and prices because the respondents indicated that 38% of customers considered quality of item and 30% considered the hygiene 22% discount. While table 8 revealed that due to poor handling 60% stuff got spoilt and lost.

Finally, traders viewed that quality assurance in perishable food business can be achieved through government support, cooperative societies and personal efforts in terms of personal cleanliness as well as that of the perishable items.

Conclusion

Quality assurance has a great effect on any business be it production or services especially in terms of handling perishable food item due to their fragile nature so as to minimize the rate of deterioration, avoid infection and disease and provide quality self reliance and National development among the citizenry.

Recommendations

- Training of youth and adults on the handling of perishable food stuff should be supported especially through apprentice programme.
- Extension services should be organized in order to impart knowledge of handling food for nutrients conservation.
- Media should increase effort on handling food and nutritional education.
- Private and non governmental organizations should be involved nutritional education and food handling.
- Food safes should be maintained by green grocers to avoid insects perching on perishable food.

References

- Anyakoha E. and Eluwa M. (2000) *Home Management for Schools and Colleges Ibadan, African Feb. Publishers.*
- Evans E. J. (1990) *Tropical Hygiene for Schools. Ibadan, Spectrum Books.*
- Hoobs C.B. and Roberts D. (1989) *Food Poisoning and Food Hygiene. Great Britain. British Library.*
- Hornby A.S. (2010) *Advanced Learners Dictionary, U.K. Oxford University Press.*
- <http://theraja.mannu.priyarrat>, (2007) *Quality Brilliance through Brilliant people.*
- <http://totalqualityassuranceservice.com>.
- Olaofe I.A. (2010) *Research Writing for Academic Growth. Zaria. A.B.U. Press Limited.*
- Reilly E. O. (2003) *The Students Cookery Book, London, Oxford University Press.*
- Uko-Aviomah E.E. and Nwabah N.I. (2009) *Food Hygiene Education: A Panacea towards Solving the Food Hygiene and Food Handling Challenges in Nigeria. Nigeria Journal of Home Economics. Enugu. Ruga Prints Nig*