Assessing awareness and perception on food quality and safety among households in elobeid, north Kordofan-Sudan

Abstract

The present work aimed to identify the awareness and the perception of household’s towards food safety and its effects on family consumptions in Elobeid town in Sudan. The investigation was adopted a framework of three concepts concerning food quality those concepts are awareness, understanding and use of foods type. The data of the study were collected through focus group discussion (8FGD) and household survey (104HHs) using systematic random sample techniques. Statistical Packages for Social Sciences (SPSS) version 16 were applied for data analysis. Results obtained showed that 52.9% HHs have not formal education, (62.5%HHs) in age group of 31-60years. The majority of HHs (87.5%) purchased their necessary goods when it was less expensive. The level of awareness in terms of functional food ingredients for healthy status is very low 42.3% this attributed to less understanding of the importance of valid ingredients in the product and indifference about nutrition fact label. 68.3% HHs belief that the level of awareness determines the choices of food items needs. 83.7% HHs perceived some vendors have less honesty and running for selling his goods, 55.7% HHs perceived that the role of monitoring corporations is very weak and need for invigoration. Vast HHs (51%) used fresh goods for daily consumption. According to the results presented in this study more efforts should be exerted towards building awareness capacity to those residents in margin cities through awareness campaigns to make nutrition information more accessible for safety consumption as recommended point of view.

Keywords: awareness, household, consumption, food quality, sudan, statistical packages for social sciences

Abbreviations: SPSS, statistical packages for social sciences; FGD, focus group discussion

Introduction

In many developing countries, food awareness is recognized to be the single most important factor that responsible for large variations in food security and poverty among smallholder farmers. In this regard, Elobeid town is highly exposed to the adverse effects of disease. Thus, household consumption analysis is important to mirror the consumer activities on food quality use and its relevant impact on the environment. Moreover, from the last couple of decades, the consumer utility function has been changing swiftly with the rapid growth of technology.

Monitoring and ensuring the safety of foods in majority of developing countries is a challenge considering that these foods are often less expensive, readily available and at sometime expire date. Determine the level of knowledge and awareness regarding households food safety issues among modern and rural communities in less development countries is become major concern of foods scientist in all over the world. Some of the communities their attitudes and beliefs affect food selection and therefore they don’t care about sources of food safety information that mainly found in the label. The risk of contracting serious illnesses is aggravated by environmental hazards caused by climate change and using less quality food in households. In addition to the reference provided above of food impacting women’s health through food scarcity and water contamination, an abundance of evidence links the evolution and distribution of infectious diseases to climate and weather. This entails a greater incidence of infectious diseases such as cholera, malaria, and dengue fever, due to the extension of risk seasons and wider geographic distribution of disease vectors. While reducing poverty and ensuring food security is a major priority, the rise of using unsafe food along with dependencies on agriculture is becoming a major problem in reducing food insecurity. Key success for food safety and quality management in food supply chain depends on the awareness of how important food safety and quality is. After such understanding is established, the managerial aspect should be introduced.

Objectives

The main objective of this study was to assessing awareness and perception regarding foods safety and quality among households and its effects on consumptions in Elobeid town in Sudan.

Methodology

Study site description

This study was conducted in Elobeid town located in Skeikan locality situated in the central part of North Kordofan State extending from latitudes 12° 30’ N to 13° 30’ and longitudes 29° 30’ to 30° 30’ E. Elobeid is capital of the state, a famous economic city which is located in a distinct geographical position connecting all the part of the country. The farming system is based on traditional system of cropping and animal husbandry. The major crops grown are millet...
and sorghum (food crops), groundnut and sesame (cash crops). Gum Arabic production and forestay products contribute significantly to household income. Animal raised are mainly sheeps, camels, and goats.

**Sampling procedure**

Simple random sampling was used due to the homogeneity of the population in the study area. 10% of the total households were selected to be represented as a sample size. 104 respondents were selected as a study sample. The study depended on primary and secondary sources of data. The primary data were collected by using questionnaire; which is designed, pretested and then randomly distributed to 104 headed households, 8 Focus group discussions also was conducted. While secondary data were obtained from references, annual reports, documents and other relevant sources.

**Data analysis**

Based on the nature of the data; quantitative and qualitative analysis were applied. The social data was coded and fed to computer and Statistical Package for Social Sciences (SPSS) version 16 was applied, using descriptive analysis. The results of data analysis were presented and shown in tables.

**Results and discussion**

Results obtained showed that 52.9% HHs have not formal education this attribute to most of them concern with cultivation and earn money, so have no time to attend schools, (62.5%)HHs in age group of 31-60 years, this indicates that the vast of the respondents in productive age, in the same table the result indicate that 61.5% from the respondents were male and 38.5% female, and 76.7% of the respondents their monthly income less than 1000SDG this affect their daily food consumption. Food handling practices and food safety are of public concern, and action is required to prevent the food-borne illnesses. It was seen that, TV and radio programs are important media for sharing the knowledge of food safety with consumers. 9

The majority of HHs (87.5%) purchased their necessary goods needs when it was less expensive. The resent study depicted that overall proportion of food samples adulterated was increased and most of daily-consumed food was adulterated in the recent years because of More than 35 food items were commonly adulterated. 10 83.7% HHs perceived some vendors have less honesty and running for selling his goods The level of awareness in terms of functional food ingredients for healthy status is very low 42.3% this attributed to less understanding the importance of valid ingredients in the product and indifference about nutrition fact label this results in line with 11 who reported that awareness of other nutrition programs or of other information on the nutrition facts label was not associated with increased or decreased risk for overweight and adulteration. 68.3% HHs belief that the level of awareness determines the choices of food items needs. The majority of respondents had never contacted their local Health Department or the Ministry of Health regarding food safety concerns, however 55.7% HHs perceived that the role of monitoring corporations is very weak and need for invigorated. Vast HHs (51%) used fresh goods for daily consumption.

**Conclusion and recommendations**

This study comes to conclude that; some respondents doubt the safety of foods; they are not deterred from consuming them. Gender, level of education and monthly income affect the consumption and their desire to purchase them. Majority of consumers were consumed fresh food not aware that certain or adulterated food borne bacteria can cause diseases that may lead to death. The study highlighted gaps in food safety knowledge and critical violations in food handling in the area of the study and socio-economic/demographic factors, such as education level, age, income and living in margin environment tend to promote a more positive attitude towards safety food consumption.

Supervision and controlling from ministry of health, monitoring corporation, and other relevant institutions concerning food safety management, conducting more relevant research, and building awareness capacity to those residents in margin area through awareness campaigns to make nutrition information more accessible for safety consumption were highly recommended.

**Acknowledgements**

None.

**Conflict of interest**

The author declares no conflict of interest.

**References**

1. Wossen T, Berger T, Swamikannu N, et al. Climate variability, consumption risk and poverty in semi-arid Northern Ghana: Adaptation options for poor farm households. *Environmental Development*. 2014;12:2–15.
2. Sohag K, Ara R, Sharifah B, et al. Dynamic impact of household consumption on its CO2 emissions in Malaysia. *Environment, Development and Sustainability*. 2014;17(5):1031–1043.
3. Asiegbe CV, Lebelo SL, Tabit FT. The food safety knowledge and microbial hazards awareness of consumers of ready-to-eat street-vended food. *Food Control*. 2016;60:422–429.
4. Al Mamun M, Rahman SMM, Turin TC. Knowledge and awareness of children’s food safety among school-based street food vendors in Dhaka, Bangladesh. *Food borne Pathogens and Disease*. 2013;10(4):323–330.
5. Atieh SA, Xuemale PA, Hillers VV, et al. Awareness and acceptance of current food safety recommendations during pregnancy. *Matern Child Health J*. 2004;8(3):149–162.
6. sheet F. Women Gender Equality and Climate Change. The need for gender sensitive responses to the effects of climate change. *Change*. 2009;11:1–11.
7. Suwanpidlekul V, Waisarayut C. Assessing awareness on food quality and safety among food small and medium-size enterprises in Thailand. *Thai Journal of Agricultural Science*. 2011;44(5):430–435.
8. ADS. Land Plan Consultancy Report, Soil Conservation, Land Use and Water Programming, Area Development Scheme; 1993.
9. Ergönül B. Consumer awareness and perception to food safety: A consumer analysis. *Food Control*. 2013;32(2):461–471.
10. Nasreen S, Ahmed T. Food adulteration and consumer awareness in Dhaka city, 1995-2011. *J Health Popul Nutr*. 2014;32(3):452–464.
11. Wojcicki JM, Heyman MB. Adolescent nutritional awareness and use of food labels: results from the National Nutrition Health and Examination Survey. *BMC Pediatrics*. 2012;12(1):55.