

# Consumer Perception & Awareness on Food Safety in the Developing Countries – A Critical Review



Subrahmanian Muthuraman, Mohammed Al Haziazi, Neena Uthaman, Samia Hudaid Sulaiym Alghazali

**Abstract:** World Health Day focuses on demonstrating the importance of food safety along the whole length of the food chain in a globalized world. Food safety is the shared responsibility. It is important to work all along the food production chain from farmers, manufactures to vendors and consumers. Unsafe food creates a vicious cycle of disease and malnutrition, particularly affecting infants, young children, elderly and the sick. Unsafe food is linked to the deaths of an estimated 2 million people annually including many children. There is an urgent need for strengthening the existing food policies to incorporate the importance of food safety, which is ignored most of the times, improving the food governance. This study is based on exploratory research by reviewing available literature on consumer perception and awareness on food safety in developing countries. The food we eat must be nutritious and safe, but we often ignore or overlook the issue of food safety. There is need to Improve the nutrition center in the country, actively spread information and raise consumer awareness about food safety issues. There are other issues related to the costs of implementation of food safety measures and the compliance with the standards which the Government should take care. There is an urgent need for strengthening the existing food policies to incorporate the importance of food safety. The policy makers must include “safe food” as a top priority and integrating “food safety” in the nutrition and food security policies and programs. Good collaboration between governments, producers and consumers helps ensure food safety.

**Keywords:** Food Safety, Food Governance, Consumer awareness, Consumption, Food Stuffs

## I. INTRODUCTION

Food safety has been defined as the conditions and measures that are necessary during the production, processing, storage, distribution, and preparation of food to ensure that it is safe, sound, wholesome and fit for human consumption [16]. Food safety is an umbrella term that

encompasses many aspects like food items handling, preparation, and storage of food to prevent illness and injury. In the beginning of 1990s, safety was included in marketing theories under the so-called credence attributes [8]. Safety in both developed and developing countries is an important, but not easily estimated, attribute due to the existence of information asymmetry (ibid). Many studies assert the role of institutions in mitigating the scarce information and promoting safety by providing trust and information through certification and labeling. In developed countries, various studies confirm that, in the consumers’ perception, public and private sector are the main source of safety assurance [5].

Food world markets over the past decade went through major changes that have caused significant repercussions on the food processing industry and farming. Thus, today consumers’ demand for safe food products in terms of hygiene and sanitary quality has today become an absolute priority causing a spectacular surge in the demand of labelled products [18]. Rapid industrialization and changing lifestyles have led to the development of large-scale catering, which prepares and distributes food to the public. There has been a marked increase in the consumption of food outside the home. Greater numbers of people eat meals prepared in restaurants, canteens, and fast foods outlets, as well as street foods [15].

## II. CURRENT SCENARIO OF FOOD STUFFS

Food is a stuff consumed to provide dietary support for a human being. Food ultimate sources from plants or animal origin, and contains essential nutrients, such as carbohydrates, fats, proteins, vitamins, or minerals. Agriculture is the single largest employer in the world. Food retail market was valued at USD 5,643.6 billion in 2013 and is expected to grow at a CAGR of 6.1% from 2014 to 2020, to reach a value of USD 8,541.9 billion in 2020 [10]. The food is digested by the organism’s cells to produce energy, sustain life, or excite growth. Retail shops are the key source of information and source of buying of Food Products [17].

Consumers ask innovative products based on different quality characteristics such as strength, safety, masterpiece, better health effects, environment surroundings protection, etc [11]. The concept of halal products or foods is now gaining a worldwide discussion due to its recognition as a substitute benchmark for safety, hygiene, and quality assurance of what we consume or drink daily. Thus, products or foods that are produced in line with halal prescriptions are willingly acceptable by Muslim consumers as well as consumers from other religions.

Manuscript received on 12 December 2022 | Revised Manuscript received on 20 December 2022 | Manuscript Accepted on 15 January 2023 | Manuscript published on 30 January 2023.

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For a Muslim consumer, halal foods and drinks mean that the products have met the requirements laid down by the Shariah law whereas for a non-Muslim consumer, it represents the symbol of hygiene, quality and safety product when produced strictly under the Holistic Halal Assurance Management System. The consumers are much concerned and always be aware of what they eat, drink and use. The awareness of the Muslim and non-Muslim consumers describes their perception and cognitive reaction to products or foods in the market. As such, their awareness is an internal state or an intuitive feeling by way of sensory perception towards the products/foods they used or consumed. The health reason is the most contributing predictor of level of halal awareness [1].

### III. KEY ISSUES

The food market is expected to bring in revenue by 2020 of \$3.03 trillion, registering a compound annual growth rate (CAGR) of 4.5 percent from 2015 to 2020 [10]. The global food retail industry includes various types of food products such as cereals, meat, packed foods, organic food items, breads, vegetables and fruits, seafood, dairy products, including ice creams, milk items and others and various other household food items [18]. Global food retail market is tremendously contributing to the growth of several other industries such as food packaging and food processing industries [11]. These industries are responsible for creating jobs and generating employment at a large scale. Large food retailers usually offer their own brands along with well established brands. In this context, consumers' attitudes and perceptions play a crucial role for ensuring the effectiveness of food quality and safety labeling, since uninformed and distrustful consumers may hinder the usefulness of the implemented policies. From the literature review it is essential to understand the consumer awareness and perceptions about food safety standards and related institutions and the consumer perceptions and awareness about current levels of food safety [14].

### IV. METHODOLOGY

This study is based on exploratory research by reviewing available literature on consumer perception and awareness on food safety in developing countries. The researcher had informal discussion with few consumer and food safety experts to understand their perception and awareness level on food safety. The researcher was trying to collect more information relating to the problem identified in this research. The purpose is not to test the hypothesis but try to discover the facts relating to the food safety through exploratory research that is appropriate to or in compliance with the hypothesis.

### V. FOOD SAFETY – A MAJOR CONCERN

Before you begin to format your paper, first write, and save the Food safety can also be affected by poverty and climate change. Currently there are numerous food safety standards that are present in the market which includes public vs private, costs involved in certification, different requirements for different markets (e.g., European, American etc.) [3]. But there are issues related to the costs of implementation of food

safety measures and the compliance with the standards. Moreover, if there is an increase in cost of food to ensure the food safety, then it becomes less affordable to poor consumers thereby leading to food insecurity [4].

Food safety is another important aspect that consumers usually take for granted, expecting all food to be intrinsically safe, since safety is a nonnegotiable attribute, and a “rational” consumer would never purchase or consume unsafe food. Nevertheless, although under normal conditions most consumers are not worried about food safety, the occurrence of a food safety incident may result in consumer anxiety and panic [13].

Sign of pervasive poverty and massive underinvestment in agriculture considered as issue. No amount of trans fat is good or healthy. Eating foods that contain it can increase your LDL (bad) cholesterol, lower HDL (good) cholesterol, and increase your risk for type 2 diabetes and heart disease. Globally discussions regarding foreign direct investment (FDI) in retail are currently under way, and if it is approved by the appropriate government, it may add benefits to the food retail industry [12]. Globally Consumer awareness towards packaged food and its health conscious should be improved among the consumers. Dominance of unorganized retail sector has a dramatic impact towards food safety standards due to price factor. Consumers feel that both food safety and quality are very important food attributes though they pay more attention to food quality when purchasing a product, since the two features are interlinked in their mind. Furthermore, in the consumers' mind traceability conjoins very well both to food safety and food quality [9].

### VI. RESULT AND DISCUSSION

According to UN, access to a safe and secure food supply is a basic human right. Everyone needs food and needs it every day either plant sources or animal sources or both. There is an urgent need for raising the awareness of the limitations of many developing nations and those susceptible to food insecurity [2]. All Countries needs to embrace structural changes to ensure food safety for future generations. The main concern stems from the Food Safety Standards Authorities should have strict guidelines [10]. This has been enacted in accordance with international codex guidelines. There are a lot of provisions in the Act that require revamping, but what we're seeing is a patchwork implementation of both old and guidelines as well as the new with respect to Food Adulteration [2]. Governments of different countries have taken various measures to ensure food safety and hygiene of food products; these are some reasons fueling the growth of food retail market. The government should completely renovate the Food Safety and Standards and state authorities [5].

The food products should display its labeling to ensure it does not violate food safety norms. Routine checks for packaged food items to check for any contravention as per Food Safety and Standards, Act should be begun. Nutrition labeling refers to the standardized presentation of the food.



The food label is one of the most important and direct means of communicating product information between buyers and sellers. Food labels are to provide consumers with information about the environmental, technical, and socioeconomic conditions under which the products were produced, as well as the health and safety aspects of food products. The information about nutrition labeling and health benefits of the food is one of the important factors that influence decision making [6]. The restraining impact of lack of supply chain effectiveness in less developed countries is expected to be medium in the short and medium terms, and low in the long term. Government investment in infrastructure and the entry of global food processing companies in developing countries are expected to minimize the impact of supply chain-related restraints [10]. The modern package label has taken the responsibility for educating the consumer about the product by multitasking such as, attracting, promoting, and motivating at the point of purchase through the information on the label. The labels were closely observed for nutrient contents declaration on calories, fat, protein dietary fiber, vitamins, and mineral content either as percentage daily value or recommended dietary intake (RDI), or per 100gms or 100 ml or per serving size. Nutrients profile should be displayed [12].

The safety of perishable foods depended on temperature control through all stages of the cold chain. These stages include the production, transport, and storage of food items both in retail display and in the domestic kitchen. The packing of chilled perishable food items into the refrigerator after returning home from shopping contributes to the cold chain. Behaviors such as these help to determine the food safety attitude of consumers and can also contribute to an understanding of their actual food safety behavior [7].

**VII. SUGGESTIONS**

Many studies suggest effectiveness of promotional activities should be increased, Nutritional value should be improved like fat content should be reduced and other minerals should be added in the product. Food safety demands adequate oversight and inspection at each step of the food production and supply chain. It is aware that the food processing industry is one of the largest in terms of production, consumption, export, and growth prospects. There is a great need for increasing the investment for national food safety systems thereby emphasizing the food safety as a public health priority [5].

In this globalized world under the open trade markets as the food crosses the borders, the coordination, cooperation, and communication between various ministries & departments must be improved to focus on food safety at each stage till it reaches the end users [3]. There is a need for effective nutritional education for young consumers has become increasingly apparent, given their general food habits and behaviour, particularly during adolescence and analyzed that the interaction between young consumers' food preferences and their nutritional awareness behaviour, within three environments (home, school and social) [15].

Governments must be proactive to establish and improve the broader national food safety systems where the food producers and suppliers operate. There is an urgent need for strengthening the existing food policies to incorporate the

importance of food safety, which is ignored most of the times, improving the food governance so that gender issues are addressed, public private partnerships are strengthened. The policy makers must include “safe food” as a top priority and integrating “food safety” in the nutrition and food security policies and programs [9]. Good collaboration between governments, producers and consumers helps ensure food safety [15]. This research will be useful in offering a theoretical base to the hypothesis and theories.

**VIII. CONCLUSION**

The food we eat must be nutritious and safe, but we often ignore or overlook the issue of food safety. There is need to Improve the Nutrition Centre in the country and increase accessibility to the information therein; Actively spread information and raise consumer awareness about food safety issues; Launch research into the effectiveness of currently mandated warning labels for poultry and investigate potential extension to other kinds of fresh meat; and aim to provide clear, unambiguous, and transparent information relating to the nature, origin, and contents of food products.

**ACKNOWLEDGMENT**

This paper is part of Arab Open University internal funding research titled “Students’ Awareness on Food Safety and Nutrient Diet in the Pandemic Environment” during 2021

**DECLARATION**

Funding	Research Grant Program funded by Arab Open University – Oman in the year 2021.
Conflicts of Interest/ Competing Interests	Authors should declare all competing interests in relation to their work.
Ethics Approval	This is only a review paper.
Consent to Participate	Not applicable.
Consent for Publication	Not applicable.
Availability of Data and Material	Not applicable.
Authors Contributions	All the four authors have contributed for the development of the paper in terms of collecting, analyzing the literature. Also contributed to the structuring the paper.
Code Availability	Not applicable.

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