



## Urbanization and Changing Dietary Habits

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### Abstract

With the rising rate of urbanization, Malaysians' opportunities to dine out have substantially expanded. Over the past several years, there has been a steady growth in the demand for multinational fast-food companies due to the global spread of fast-food marketing. Today, the fast-food sector has adapted to Malaysian dietary needs and has become a major phenomenon in the country. Changes in dietary patterns, such as food choices, are known to be linked to changes in health status and may increase the number of chronic illnesses. Thus, a rapid increase in urbanization brings about a change in economic status, resulting in significant changes in lifestyle, including food habits and diseases.

**Keywords:** Fast food, food additives, preservation, food hygiene, non-communicable diseases

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## INTRODUCTION

Food plays a vital role in representing our cultural background, way of life, values, and level of wealth. In today's globalized and urbanized world, our dietary habits are evolving. Fast food has gained popularity as a convenient meal option among Malaysians due to factors such as increasing prosperity, urbanization, changing lifestyles, and more women joining the workforce (Baskaran et al., 2017; Ismail et al., 2022). The fast-paced nature of modern life has led people to favor eating at local fast-food restaurants instead of preparing meals at home (Krishnan et al., 2022). Access to a wide range of foods, including calorie-dense and processed options, has contributed to a shift from traditional to Western-style diets (Casari et al., 2022).

Maintaining a nutritious diet is crucial for overall health and the prevention of chronic diseases, as it helps reduce the risk of being overweight or obese (Lassale et al., 2019). Various factors, including individual characteristics and influences from the physical, social, and economic environments, contribute to poor dietary choices, with easy access to affordable fast food being a significant factor (Velde et al., 2022; Sulaiman et al., 2020). The accessibility of fast food promotes impulsive and binge eating, which are influenced by strict time constraints for meal preparation at home, at work, and in the community. In many urban low and middle-income communities, the burden of infectious diseases remains high, alongside increasing rates of obesity and dietary-related non-communicable diseases related to diet (Vargas et al., 2022; Abidin et al., 2020).

Food safety has become a major concern in developing countries. The importance of quality, freshness, ease of preparation, and

cleanliness in urban food safety has gained significant attention. Customers of fast food restaurants have expressed concerns about various food-related issues, including pesticides, vegetable residues, excessive use of artificial flavor enhancers and colorants, bacterial contamination, migration of harmful substances from plastic packaging, and the generally unsanitary conditions in which food preparation and handling practices (Dey & Nagababu, 2022; Omari & Frempong, 2016). As consumers, we all bear the responsibility of ensuring the safety of the food we consume. Given the complexities of food safety, consumers need quick, accurate, and reliable information about the health and nutritional risks associated with their food choices due to the complexity of food safety (Wang et al., 2022).

This study aims to describe the impact of unhealthy food consumption, particularly fast food, resulting from lifestyle changes in urban environments. It also explores how cities can develop sustainable environmental practices to ensure that people will have access to healthy, nutritious, and safe food. Initiating and implementing policies, awareness campaigns, and programs by the government, local authorities, and Non-Governmental Organizations (NGOs) are advantageous in addressing issues related to unhealthy food and food safety for the urban community, as they are essential factors for enhancing the quality of urban life.

### Urban Food: Chemical Risks

Food safety is a global concern that affects everyone around the globe. It involves protecting the food supply chain from the introduction, growth, or survival of harmful microbial or chemical

agents (Gizaw, 2019). In the urban food landscape, chemicals are extensively used to inhibit microbial growth of microbes like yeasts and prevent fat oxidation of fats that leads to rancidity, as highlighted by Dr. Nooratiny Ishak of the Department of Chemistry in Malaysia. Consequently, a significant portion of our food consists of chemical additives. Commonly used preservatives include sugar, salt, nitrites, Butylated hydroxytoluene (BHT), tert-butylhydroquinone (TBHQ), vinegar, citric acid, and calcium propionate. Adulterants, substances that compromise the safety or efficacy of food ingredients, have been added to food since ancient times to increase quantity while reducing quality (Bavadharini et al., 2022).

The presence of hazardous substances in food poses a threat to many nations, causing various illnesses among consumers, often without their awareness (Essuman et al., 2022). When consumers have doubts or suspect fraud in a particular food product, there is currently no standardized analysis available to differentiate between a genuine product and an adulterated one. However, the temptation for adulteration, especially during periods of food scarcity and the pursuit of economic profit, has increased alongside population growth, urbanization, and the demand for more convenient and readily available, and ready-to-serve food products (Meghwal et al., 2022).

While developed countries have advanced technology to detect counterfeit and contaminated food products, developing countries often lack the necessary equipment to detect counterfeit and tainted food goods (Bavadharini et al., 2022). The Malaysian Department of Chemistry has made strides in enhancing its services through scientific research and quality assurance to ensure compliance with regulations regarding hazardous compounds in food. Molecular methods are preferred for detecting biological adulterants, while physical and biochemical techniques are employed to identify other adulterated substances. Breakthroughs in food. To combat chemical risks in urban foods, animal testing, chemical analysis, endocrine-active substances, toxicological thresholds, margin exposure, and DNA technology have contributed to addressing chemical risks in urban food (Meghwal et al., 2022).

### **Urban Eating Lifestyle Vs. Chronic Diseases**

The current prevalence of chronic diseases in Malaysia and the contributing factors that contribute to them, are closely intertwined with lifestyle and urban eating habits. Consequently, the government has called for behavior modification among the population. Chronic diseases such as diabetes, heart disease, and cancer are prevalent examples of chronic diseases. Mrs. Mushidah Zakaria, Senior Dietitian from Prince Court Medical Centre, highlighted that a significant percentage of adults, 25.1%, are physically inactive, with females exhibiting higher levels of inactivity at 28.2% (Yadav & Krishnan, 2008). The dietary habits of urban dwellers, including frequent dining out, are influenced by viral food trends on social media platforms, and e-hailing services have made food delivery more accessible.

Many meals consumed outside the home consist of large portions and are higher in salt and sugar, and low in fiber content. A presenter noted that only 1 in 5 respondents were aware of the Malaysian Healthy Plate Concept, which advocates for a quarter of the plate to be filled with protein, a quarter with carbohydrates, and half with vegetables.

Processed food refers to food that has undergone cooking, canning, freezing, packaging, or alteration in nutritional composition through fortification, preservation, or unconventional preparation methods. A lack of awareness exists regarding the additives present in processed foods. Additives in processed foods can include artificial colors, flavors, sweeteners, emulsifiers, and preservatives. Processing food occurs during cooking, baking, or food preparation. Unprocessed foods, such as fruits, vegetables, grains, nuts, and legumes, herbs, spices, garlic, eggs, and milk, as well as seafood, and meats, are reliable sources of protein.

Processed foods are created when substances such as oil, sugar, or salt are added to foods before packaging. According to (Moubarac et

al. (2013), the quality of the diet declines as the proportion of ultra-processed products increases. However, not all processed foods are detrimental to health; some, such as bread, cheese, tofu, and canned tuna or beans, can be part of a healthy meal. Ultra-processed foods are the ones that should be minimized, as they account for nearly half of the calories consumed. These foods undergo multiple processes, such as extrusion, molding, and milling.

Examples of ultra-processed foods include soft beverages, chips, chocolates, candies, ice cream, sweetened breakfast cereals, packaged soups, chicken nuggets, hotdogs, fries, and other foods that include many extra components and are heavily modified food items. Making small modifications to our habits can have a positive impact. For instance, reducing the consumption of sugary beverages and increasing fiber intake is recommended. Aim for at least two servings of fruits and three servings of vegetables daily, as fiber enhances satiety. Portion control is important, and it is beneficial to have at least one home-cooked meal each day, choosing low-fat foods. Additionally, engaging in physical activity for a minimum of 2 hours and 30 minutes per week is advised.

### **Food Premise Hygiene: Crisis Vs. Safety**

Despite Malaysians' strong passion for food, there is a lack of significant concern about food safety. The urban phenomenon of diverse food options from a wide range of foods from various locations presents challenges in ensuring food safety nationwide poses obstacles; the main concern is how food safety as food supply chains become more complex. This is not due to say that incidents are scarce. Foodborne diseases rank among the top five communicable diseases in Malaysia (Abdullah & Ismail, 2021). According to the World Health Organization (WHO, 2016), among the established foodborne illness burden in Southeast Asia faces a burden of foodborne illnesses that include non-typhoidal Salmonella, pathogenic Escherichia coli, and norovirus.

The food industry has transitioned from a scenario where distribution channels were well-known and unlimited and widely known to a booming global trade with a broader range of items supplied items, posing new challenges for food safety. Factors such as the emergence of these foodborne pathogens, rapid outbreak spread, and the magnitude of food crises contribute to these challenges. Notably, high-demand foods carry a greater risk of food contamination (Ismail et al., 2022).

Cross-contamination and unhygienic food handling practices are the key factors contributing to the occurrence of foodborne diseases. Mr. Baharudin bin Osman, an Environmental Health Officer from Pejabat Kesihatan Daerah Seberang Perai Tengah, emphasized six fundamental aspects of food safety: food handling, facilities and equipment, food preparation, storage practices, washing and sanitation, and vector control.

To mitigate hazards in the food industry, the government has enhanced preventive efforts. Malaysia's Food Hygiene Regulations, implemented in February 2009, aim to ensure the provision of providing customers with high-quality and safe food to consumers. This legislation mandates the registration of food premises and addresses the conduct, maintenance, handling, and specific requirements for preparing, packing, serving, storing, and selling food. Ongoing surveillance programs, effective inspections, and risk communication are crucial for maintaining food safety.

Other relevant laws include the Food Act 1983, Food Regulation 1985, and Vector Borne Control Act 1988. Strategies for guaranteeing food safety involve reviewing and updating legislation, strengthening implementation, improving collaboration among government agencies, consumer groups, academia, the food industry, and international organizations, as well as developing and training food handlers. Additionally, raising customer knowledge and awareness of food safety issues is paramount.

## CONCLUSION

In summary, the impact of urbanization on food and eating habits is significant due to factors such as a rising global population, technological advancements, and stressful, busy lifestyles. This shift has resulted in individuals having limited time to prepare meals at home and opting for dining out or takeaway options. However, it is crucial for consumers to be aware of the potential health risks associated with the chemicals present in processed foods, which can contribute to chronic diseases.

To mitigate these effects, it is important to incorporate regular physical exercise, maintain a balanced and healthy diet, and include a variety of homemade meals. Additionally, consumers can make informed choices by selecting establishments that adhere to food safety standards such as Good Manufacturing Practice (GMP), Hazard Analysis and Critical Control Point (HACCP), Clean, Safe and Healthy or "Bersih, Selamat dan Sihat" (BESS), and the Industry Responsibility Safe Food Scheme (MESTI) implemented by the Food Safety and Quality Division, Ministry of Health.

Education about healthy eating practices, fostering social responsibility among food entrepreneurs, and effective governance by local authorities are vital factors in enhancing the important factors for urban quality of urban life. By promoting these measures, we can ensure the health and safety of consumers while supporting sustainable urban development.

## CONTRIBUTION STATEMENT

A webinar entitled "When food can kill you" was held on 8th June, 2022. The webinar was conducted by UiTM students with three panelists from a great background discussing the relevant topics. The first topic was "Urban Food: Chemical Risk" by Dr. Nooratin Ishak, a Science Officer from the Department of Chemistry, Malaysia. This topic discusses the composition of chemicals in fast foods, such as food additives, preservation, and adulteration. This topic was explained in detail in terms of the advantages and disadvantages of these chemical compounds in fast foods. The second topic was "Urban Eating Lifestyle vs. Chronic Disease" by Mrs. Mushidah Zakiah, a senior dietitian from Prince Court Medical Centre. The objectives of this topic are to gain knowledge about the prevalence of chronic illnesses in Malaysia today, the factors that contribute to them, and how urban eating practices relate to them. Mr. Baharudin bin Osman, an Environmental Health Officer from Pejabat Kesihatan Daerah Seberang Perai Tengah, Ministry of Health, presented "Food Premises Hygiene: Crisis vs. Safety." This topic benefits the audience to gain awareness about food safety and food hygiene on food premises. The webinar attracted a total of 323 participants from various backgrounds.

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