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**SOCIO-ECONOMIC IMPLICATIONS OF FAST-FOOD CONSUMPTION IN
URBAN SRI LANKAN CONTEXT: EVIDENCE FROM WATTALA–MABOLA
URBAN COUNCIL AREA****M.A.F. Mubashshira*, K. Rewathy***Department of Geography, Faculty of Arts, University of Colombo***Correspondence E-mail: mubashshira314@gmail.com, TP: +94761788905*

Abstract: Fast food has become increasingly embedded in urban lifestyles, reshaping dietary behaviour, cultural practices, and household economics. The main objective of the research was to analyse the socio-economic impacts of fast-food consumption among urban dwellers. A mixed-method approach was used, considering on both primary and secondary data. The core dataset consisted of structured questionnaires administered to 116 residents selected through stratified sampling while considering the representation of all major ethnic groups in the study area. To conduct interviews, 20 purposively selected participants, including health officers, government officials, and community members were interviewed to capture deeper social and economic knowledge. Findings reveal pronounced social impacts, with 97.4% of respondents identifying adverse health outcomes and 91.4% reporting greater vulnerability among children and youth. Cultural changes were evident through declining traditional food habits (87.9%), disruption of family routines (81%), and reduced cooking skills (75%). Regression analysis demonstrated a statistically significant positive association between fast-food frequency and BMI ($R = 0.30$ at $p < 0.05$), though the relationship remained modest due to external lifestyle and sampling factors. Economically, fast food contributed to industrial growth (89.7%) and tax revenue (81.9%) but simultaneously imposed substantial financial burdens, including rising healthcare costs (94.8%), pressure on low-income families (94%), and household budget inflation (89.7%). Overall, the study highlights how urban food culture, behavioural patterns, and biological responses interact within a broader socio-ecological system, emphasizing the need for targeted public health interventions and policies to mitigate the long-term social and economic risks associated with fast-food dependency.

Keywords: Fast-food consumption; socio-economic impacts; sustainable development; urban health; Wattala–Mabola; Human Disease Ecology Model

1. Introduction and Background

Urban food consumption patterns have transformed significantly across rapidly developing Asian contexts due to urbanization, rising incomes, changing lifestyles, and the expansion of both local and global food chains. Among these changes, fast-food consumption has become a prominent feature of urban living because of its convenience, affordability, and association with modern lifestyles. Fast foods are typically energy-dense, high in saturated fats, sugar, and sodium, providing immediate accessibility while offering limited nutritional value (World Health Organization, 2016). The growth of fast-food systems extends beyond dietary trends, representing a socio-economic phenomenon that reshapes household consumption behaviour, local labour markets, and traditional food cultures (Kendall, 2023).

Across Asia, the socio-economic consequences of fast-food consumption are increasingly evident. In India, rapid economic growth and urbanization have fuelled a surge in fast-food culture, particularly among younger populations, as outlets leverage globalization and marketing to shape dietary behaviours (Swaminathan & Viswanathan, 2016; Keshari & Mishra, 2016). In Pakistan, studies of college students show that fast-food consumption is strongly influenced by peer behaviour, time constraints, and marketing, with Westernized dietary norms reinforcing its appeal among youth (BMC Public Health, 2023). This trend contributes to unhealthy weight gain, insulin resistance, and other diet-related health concerns. In Malaysia, youngster's consumption is associated with sociodemographic traits such as ethnicity, school locality, and frequency of eating out, highlighting how accessibility and urban lifestyles shape fast-food intake (Man et al., 2021). Collectively, these patterns suggest that in many Asian contexts, fast food has evolved from a dietary choice to a socio-economic symbol of modern urban living, closely tied to income, cultural attitudes, and food environments. Sri Lanka appears to be following a similar trajectory under its own urban transformation.

The Wattala–Mabola Urban Council area in Sri Lanka provides a suitable context to examine the socio-economic implications of fast-food consumption. This area is characterized by a dense concentration of middle and high-income households, numerous educational institutions, busy commercial zones, and well-connected transport corridors facilitating access to fast-food outlets. Many restaurants are located within residential neighbourhoods and near schools, increasing exposure among children, youth, and working adults. Data from this study indicate that fast-food consumption is highest among children and youth aged 0–29 years (80.1%), middle and high-income earners (71.5%), and undergraduates and students below 18 years (67.2%), with 72.4% of respondents living within 1–3 km of a fast-food outlet (Mubashshira, 2026). Factors such as taste preferences, convenience, peer influence, workload, time constraints, and promotional discounts further reinforce these consumption patterns. The combination of accessibility, economic capacity, and socio-cultural influences has created a distinctive urban food environment in which fast foods are embedded in daily routines.

The socio-economic impacts of fast-food consumption are multifaceted. Studies indicate that reliance on fast food among urban populations, particularly youth and college students, has significant implications for both health and lifestyle. Those findings suggest that fast-food consumption in urban Asian settings represents a broader socio-economic phenomenon, linked to lifestyle, social interactions, and health outcomes. The expansion of fast-food systems also intersects with local economies, influencing employment in the food service sector while affecting small-scale traditional food vendors and local agricultural producers (Kendall, 2023).

Despite its relevance, research specifically examining the socio-economic impacts of fast-food consumption within the Wattala–Mabola Urban Council area remains limited. No previous study has comprehensively addressed these dimensions in the local context. Given the high concentration of fast-food outlets, significant consumption among youth, and a diverse mix of middle and high-income households, the area provides a timely and relevant context for investigation. This study aims to fill this research gap and generate valuable insights into the socio-economic dimensions of fast-food consumption in an urban Sri Lankan setting, contributing to the development of sustainable, culturally appropriate, and health-conscious food practices.

2. Literature Review

2.1 Social Impacts

▪ Health Impacts

Global Overview:

Previous studies indicate that the poor nutritional quality of fast food, combined with high levels of salt, saturated fats, and trans fatty acids, may contribute to the prevalence of hypercholesterolemia, hypertension, type 2 diabetes mellitus, obesity, and cardiovascular diseases, particularly in Western societies (Jahan et al., 2020). Reviews of the short and long-term health consequences of fast-food consumption demonstrate that obesity is widespread and predisposes individuals to chronic conditions such as heart disease and diabetes. Fast foods contain refined sugars that can cause rapid spikes in blood sugar levels, leading to fatigue, decreased energy, frequent hunger, and impairments in brain function and memory. Excessive consumption of fast food over weeks, months, or years can result in long-term health problems. High intake of saturated fats can elevate cholesterol levels, which increases the risk of heart disease, hypertension, and stroke (Jia et al., 2022).

A study of 33,594 children aged 3–14 in the United Kingdom found that fast-food consumption was particularly associated with negative health outcomes, 27.1 percent were overweight or obese, and 12.6 percent were classified as obese (Fraser & Edwards, 2010). Another study of boys aged 13–15 revealed that fast-food consumption had significant negative effects, including increased BMI SD scores ($b = 0.08$, 95% CI = 0.03–0.14), increased body fat percentage ($b = 2.06$, 95% CI = 1.33–2.79), and increased body fatness (OR = 1.23, 95% CI = 1.02–1.49) (Fraser et al., 2012).

In Saudi Arabia, a study found that 25 percent of female students were overweight or obese, with 74.5 percent of these students consuming fast food 1–2 times per week. A significant positive association was observed between increased consumption of fish sandwiches and higher BMI (Alfawaz, 2012). In Iraq, fast food consumption was strongly linked to obesity, elevated blood pressure, and cardiovascular disease due to its high fat and carbohydrate content, although its association with diabetes was comparatively low (Mahmood & AbdulWahab, 2020).

A study in India reported that 74.4 percent of consumers were aware of the negative health effects of fast-food consumption, which included increased risks of mental health disorders (30.8%), weight gain (6.4%), cancer (30.8%), diabetes (21.8%), obesity (16.7%), high stress (33.3%), memory loss (9%), and cardiovascular disease (25.6%) (Hajare Wani & Sarode, 2018). Another study conducted in the Lucknow district found alarming obesity prevalence among school children aged 9–13: 100% of 9-year-olds were obese at stage 1, 42.8% of 10-year-olds at stage 3, 8.6% of 11-year-olds at stage 3, 36.3% of 12-year-olds at stage 2, and 8.3% of 13-year-olds at stage 3 (Singh & Mishra, 2014).

These findings underscore that the health impacts of fast-food consumption are global. Particularly in developing countries, an increasing number of children and young people are experiencing health problems associated with elevated fast-food consumption.

Sri Lanka Overview:

A study on fast-food consumption among students of Sri Lankan government universities indicated that fast-food intake is increasing among children and youth, with unhealthy eating habits particularly prevalent among university students. These habits have been shown to adversely affect nutrition and health. The study found that 32.3 percent of students were overweight according to BMI, and a positive relationship was observed between fast-food consumption and BMI, with 30.3 percent of students consuming fast food 2–3 times per week (Saujan et al., 2024). A study conducted in the Kiriella area of Ratnapura revealed that fast-food consumption is associated with overweight among youth; 19 percent of high school students, 28 percent of university students, and 3 percent of working adults were overweight. Furthermore, 50 percent of overweight cases were specifically related to occupational status, highlighting a close link between fast-food consumption and excess weight (Priyanth & Dassanayaka, 2022). Another study found that approximately 54 percent of students consumed fast food more than once a day, with about 7 percent of women overweight and 2 percent obese. Among men,

around 12 percent were overweight, placing them at a higher risk of developing diet-related non-communicable diseases (Jayasinghe & De Silva, 2014).

▪ Other Social Impacts

Fast-food consumption in South Africa has had a significant impact, particularly among youth and students. It is often seen as a symbol of modernity and progress, providing convenience and opportunities for social interaction within an urban lifestyle. Students are encouraged to rely on fast food due to shifts toward a more independent lifestyle, the availability of diverse food choices, limited cooking skills, and constraints on time and resources. Fast-food restaurants also function as social hubs where individuals gather for entertainment and leisure (Rabotata & Malatji, 2021). A study on the effects of fast-food consumption on family life in Nigeria found that people do not consume fast food because of a lack of kitchen utensils or because it is more economical than home-cooked meals. Rather, consumption is driven by taste, leisure, entertainment, and work demands. However, frequent fast-food consumption has been reported to contribute to children becoming less active, a decline in cooking skills, a preference for fast food over home-cooked meals, and a dislike of traditional foods among some family members. Additionally, mothers have less time to teach children about healthy eating habits and table manners, awareness of proper nutrition is low, and family time is reduced (Ejike & Obeagu, 2018). In Bangladesh, fast-food outlets often target schools and workplaces. Economic inequalities have made minority communities more dependent on fast food. As traditional family meals are increasingly replaced by fast-food options, cultural and familial bonds are affected. Furthermore, peer influence and advertising play a major role in shaping the consumption patterns of young people (Nusrat, 2022).

2.2 Economic Impacts

The article *Burgernomics: The Impact of Fast Food on the Economy* highlights several economic impacts of fast-food consumption:

Employment: The restaurant industry alone employs over 15 million people in the United States; however, significant gaps exist in minimum wage levels and workers' rights.

Income inequality: Fast-food executives earn hundreds of times more than their workers. Employees have been advocating for a minimum wage of \$15, which has led to government subsidies to support low-income workers.

Health costs: The ingredients commonly found in fast food contribute to various health problems, resulting in high medical expenses and reduced employee productivity (Faster Capital, n.d.).

The convenience, affordability, and taste of fast food make it a popular choice in Portugal, particularly among higher education students. Most students consume fast food several times a month, spending approximately eight euros per meal. This reflects a shift in spending patterns toward quicker and cheaper food options. Additionally, limited student budgets and the increased healthcare costs associated with frequent fast-food consumption contribute to economic strain (Oliveira & Raposo, 2024). In China, fast-food consumption has several economic impacts. It helps reduce income gaps by providing employment opportunities through food distribution and packaging processes. The fast-food industry also stimulates the growth of related sectors, including food packaging, delivery services, and traditional catering. Moreover, it promotes economic efficiency by allowing individuals to save time on meal preparation (Song, 2023).

Although few studies in Sri Lanka have examined fast food consumption, mostly focusing on university students and related health concerns, showing high intake among youth and associated health risks. However, there is limited research on urban dwellers, particularly regarding both health and economic impacts. This study addresses this gap by exploring fast food consumption patterns, socio-cultural influences, and potential consequences among residents of the Wattala–Mabola urban area.

3. Theoretical Background: Human Disease Ecology

The human disease ecology model provides a framework to understand how health outcomes are shaped by the interaction of social, economic, behavioral, and environmental factors. In the context of urban dietary patterns, such as fast-food consumption, this model highlights that increased exposure to calorie-dense foods, combined with socio-economic and lifestyle factors, can influence the prevalence of non-communicable diseases, including obesity. In the Wattala–Mabola Urban Council area, empirical evidence from this study shows a positive relationship between monthly fast-food consumption and BMI, indicating that higher consumption is associated with increased body weight. The human disease ecology perspective offers a theoretical lens to interpret these socio-economic and health-related patterns, emphasizing the interconnectedness of environment, behavior, and health. A more detailed application of this model to the study results is discussed in the Results and Discussion section.

4. Methodology

4.1 Study Area

The study was conducted in the Wattala–Mabola Urban Council area, which falls under the Wattala Divisional Secretariat Division in the Gampaha District of Sri Lanka's Western Province. The division comprises 46 Grama Niladhari Divisions, of which six form the fully urbanized administrative units governed by the Wattala–Mabola Urban Council. Geographically, the area lies near 7.0021° N latitude and 79.9025° E longitude and is bordered by Negombo Lagoon to the north, the Kelani River to the south, the Ja-Ela–Mahara Division to the east, and the Indian Ocean to the west. With a population of about 31,471, the locality is characterized by a culturally diverse and predominantly urban community experiencing rapid spatial and socio-economic transformation. This area was selected for the study as no prior research has specifically examined the socio-economic implications of fast-food consumption within this urban context. Its high level of development, accessibility, and relevance to the study objectives also make it an appropriate setting for investigating emerging urban dietary behaviors.

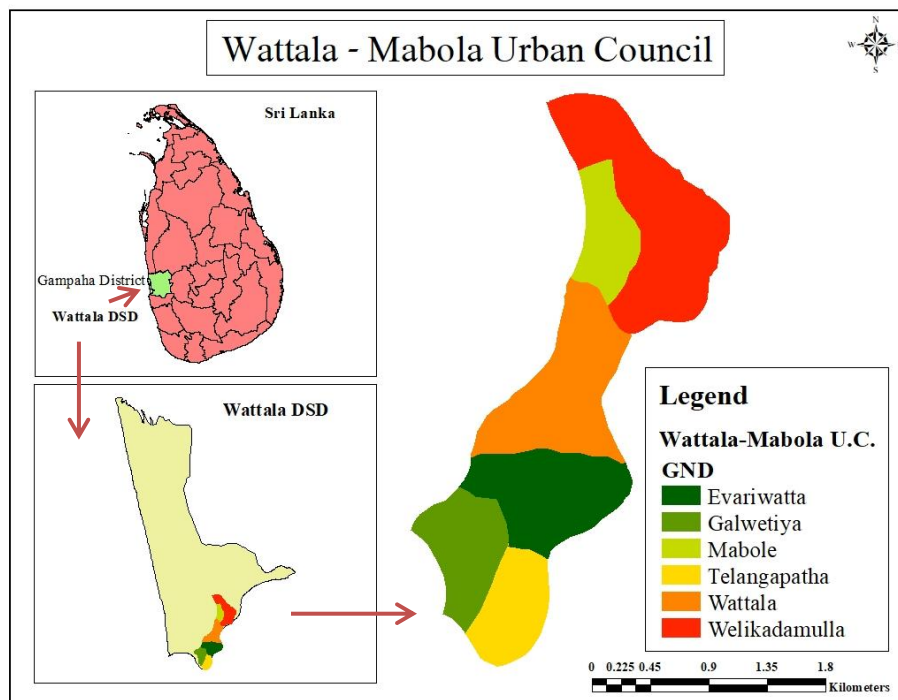


Figure 1: Wattala-Mabola Urban Council Study Area Map

4.2 Data and Data Collection Methods

This study used both primary and secondary data, with primary data serving as the core source of evidence. A structured, mixed-method questionnaire was administered to selected urban residents to capture their fast-food consumption patterns and associated socio-economic characteristics. To complement the survey findings, semi-structured interviews were conducted with three key stakeholder groups: five health officers attached to the Wattala Medical Officer of Health Office and the Wattala–Mabola Urban Council, seven government officials from the Urban Council and the Divisional Secretariat, and eight community members. In total, 20 interviewees contributed detailed insights into the health and socio-economic implications of fast-food consumption in the area.

Secondary information was obtained from research publications, official documents, books, digital sources, and the 2024 administrative report of the Wattala Divisional Secretariat Division. These sources supported the triangulation of primary data and provided a broader contextual understanding for the study.

4.3 Sampling Methods

Both probability and non-probability sampling techniques were applied in this study. A stratified sampling approach was used to select survey participants from the six Grama Niladhari Divisions within the Wattala–Mabola Urban Council area. These divisions are Telangapatha, Evariwatta, Wattala, Mabola, Galwetiya, and Welikadamulla, together represent a population of 31,471 and include a diverse mix of ethnic groups. To ensure adequate representation, each ethnic group was treated as a separate stratum, and samples were distributed proportionately across the major ethnic categories.

Given practical constraints such as time limitations and accessibility challenges, 116 respondents were randomly selected from the six divisions. Questionnaires were therefore distributed following a ratio of 300:1, ensuring broad coverage of urban households while maintaining feasibility for the researcher.

In addition to the survey, qualitative data were collected through interviews using a purposive non-probability sampling method. A total of 20 individuals were selected based on their relevance to the study context, allowing for richer insights into the social and economic dimensions of fast-food consumption.

The number of samples drawn from each Grama Niladhari Division is summarized in the following table.

Table 1: Questionnaire Sampling Table

Grama Niladhari Divisions	Ethnic Groups					Total Samples
	<i>Sinhala</i>	<i>Tamil</i>	<i>Muslim</i>	<i>Burgar</i>	<i>Other</i>	
Telangapatha	9	3	2	1	1	16
Evariwatta	12	4	1	1	1	19
Wattala	7	4	1	1	-	13
Mabola	6	2	10	1	-	19
Galwetiya	5	5	1	-	-	11
Welikadamulla	12	6	18	2	-	38
Total Samples						116

Source: (The Annual Report of the Wattala Divisional Secretariat Division, 2024)

Note: The important of stratified sampling method

It was done based on ethnicity across the 6 GN divisions where more migrant population can be encountered, to ensure proportional representation. Within each ethnic group, participants were randomly selected, which naturally included people of different ages, income levels, and education backgrounds. This allowed the study to cover all key socio-demographic categories while analysing patterns among fast food consumers.

4.4 Data Analysis

Data analysis was conducted using both quantitative and qualitative techniques in line with the study objective. Quantitative data obtained through the questionnaire were analyzed using descriptive and inferential statistical methods, while qualitative information from interviews and open-ended responses was examined through thematic analysis.

Descriptive statistics were used first to summarize the socio-economic impacts reported by respondents. Inferential analysis was then performed using simple linear regression at the 0.05 significance level, with Body Mass Index (BMI) as the dependent variable and the monthly frequency of fast-food consumption as the independent variable. This analysis helped determine whether an increase in fast-food consumption was associated with changes in BMI. External factors influencing BMI were excluded to isolate the direct relationship. The interpretation of the regression results also drew on the Human Disease Ecology Model, which provides a conceptual basis for understanding how behavioural factors such as dietary practices interact with socio-economic and environmental conditions to influence health outcomes. This theoretical perspective guided the interpretation of how increased fast-food consumption may contribute to elevated BMI within the study population.

Qualitative data related to social and economic impacts were analysed using a thematic approach. Key themes were developed around physical and mental health, household economic pressures, and broader socio-economic consequences identified through interviews, questionnaire narratives, and secondary literature.

The results are presented using pie charts, bar graphs, and descriptive summaries for clarity. Microsoft Excel was used to manage the dataset, perform statistical calculations, and create visualizations, while ArcGIS 10.8 was used to prepare the map of the study area.

The simple regression analysis was based on the following equation:

$$y = a + bx$$

5. Results and Discussion

5.1 Social Impacts of Fast-Food Consumption

The social implications of rising fast-food consumption in the study area reveal a complex interplay between changing lifestyles, family routines, and community interactions. The responses gathered illustrate that fast food is now embedded in everyday social behaviour, shaping how people eat, interact, and negotiate their cultural food identity. As illustrated in **Figure 2**, a substantial proportion of participants (89.7%) noted that the expansion of fast-food outlets has increased the availability and accessibility of food choices. While this wider choice encourages convenience, respondents also emphasized several negative social outcomes. For instance, 77.6% reported that fast-food consumption has become a common facilitator of social gatherings, especially among youth, subtly shifting social norms around eating practices.

A strong concern highlighted by 87.9% of respondents was the gradual decline of traditional dietary habits, indicating a cultural shift that may have long-term implications for food heritage. Changes within the household were also evident 81% believed that frequent fast-food use disrupts family dynamics, contributing to reduced home-cooked meals and shared mealtime routines. This is complemented by the view of 81% who felt that family time is diminishing as individuals increasingly opt for quick meals rather than collective dining experiences.

Health-related stigma and concerns emerged as the most dominant theme, with 97.4% identifying adverse health impacts as a major social consequence. This aligns with public health discussions on how lifestyle-driven food choices can influence community wellbeing. Moreover, 91.4% stressed that children and adolescents are particularly vulnerable to fast-food habits, which may shape long-term behavioural patterns and health outcomes. Additional concerns included a reduction in cooking skills (75%) and, among a small proportion (0.9%), the emergence of an excessive or “greedy” desire for fast food.

Overall, the results illustrate that while fast-food consumption contributes to convenience and social bonding, it simultaneously affects cultural practices, family cohesion, and community health perceptions. These findings underscore the broader social dimensions of dietary transitions occurring within urban Sri Lankan settings.

The assessment of self-reported changes in Body Mass Index (BMI) provides important insight into how dietary behaviours, particularly fast-food consumptions are influencing physical health within the study area. The responses show a clear pattern that aligns with broader nutritional and epidemiological concerns. As shown in **Figure 3**, more than half of the participants (57.8%) reported an increase in their BMI over time. This tendency suggests that regular reliance on calorie-dense, commercially prepared meals may be contributing to gradual weight gain among urban residents. In contrast, only a very small proportion (2.6%) indicated a decrease in BMI, while 39.7% stated that their BMI had remained unchanged.

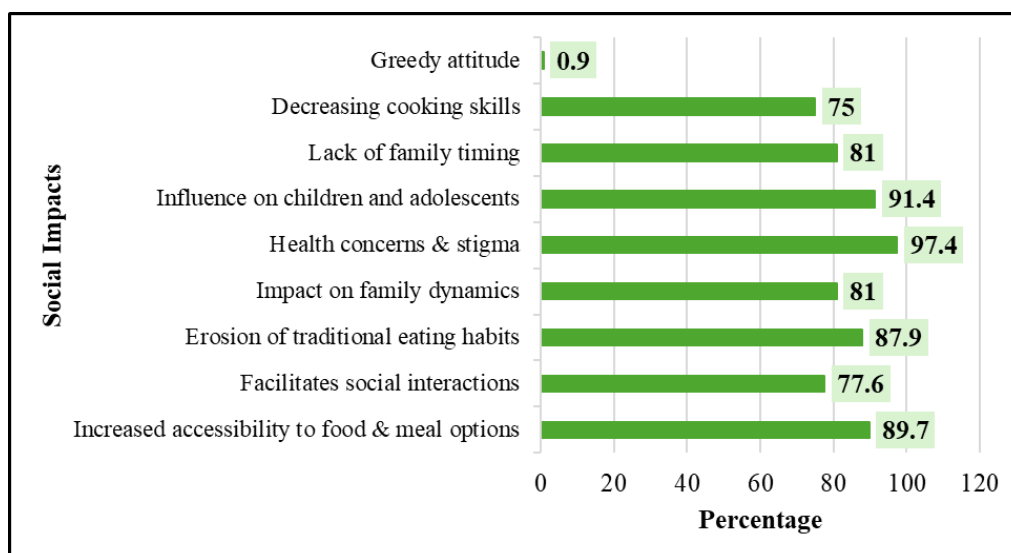


Figure 2: Social Impacts of Fast-Food Consumption in Wattala-Mabola Urban Council Area

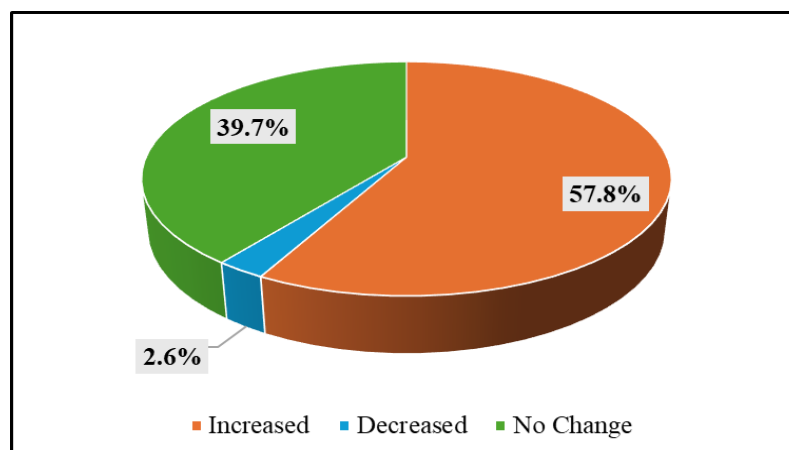


Figure 3: Self-Reported Changes in BMI Among Respondents in the Wattala–Mabola Urban Council Area

Taken together, these findings demonstrate a clear association between frequent fast-food consumption and rising BMI levels among a considerable portion of the respondents. The predominance of individuals reporting weight gain reflects a broader dietary shift toward convenience-oriented food choices and underscores the emerging health risks linked to such patterns. In order to substantiate this observed relationship, a simple regression analysis was carried out, and the corresponding results are presented below.

To examine the association between fast-food consumption and body mass index (BMI) among urban dwellers, a simple regression analysis was conducted. In this analysis, the monthly frequency of fast-food consumption was treated as the independent variable, while the BMI of respondents was the dependent variable. External influencing factors were deliberately excluded to isolate the direct relationship between consumption patterns and BMI. The results of this regression provide insight into how increased fast-food intake corresponds with changes in BMI among the population.

Based on that, the regression equation is as follows.

$$Y = 25.0272 + 0.1756 X$$

Y = BMI

X = the monthly frequency of fast-food consumption

Table 2: Regression Statistics

<i>Regression Statistics</i>	
Multiple R	0.302001748
R Square	0.091205056
Adjusted R Square	0.08323317
Standard Error	3.919193817
Observations	116

The correlation between monthly fast-food consumption and body mass index (BMI) is reflected by a correlation coefficient of 0.30, indicating a positive association between the two variables. This suggests that higher frequency of fast-food consumption is associated with increased BMI among respondents. The R-squared value of the regression model is 0.0912, implying that while monthly consumption contributes to variations in BMI, it explains only a small proportion of the total variability. The relatively low R-squared is understandable given that external factors influencing BMI were excluded from the model.

The standard error of the regression equation is 3.92, which is below the threshold of 5, suggesting that the regression line adequately represents the distribution of the observed data. This analysis was conducted using a sample of 116 respondents, providing a focused estimate of the relationship between fast-food consumption frequency and BMI in the study area. Overall, the results demonstrate a moderate but meaningful positive correlation, supporting the notion that frequent fast-food intake can contribute to higher BMI levels among urban dwellers.

Table 3: ANOVA Table

ANOVA					
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	1	175.732199	175.7322	11.44084	0.000985214
Residual	114	1751.04914	15.36008		
Total	115	1926.781339			

The F-test for the regression model yielded a significance value of 0.0009. Given that this value is below the 0.05 alpha threshold, the results indicate that the regression equation is statistically significant and can be considered a reliable representation of the relationship between monthly fast-food consumption and BMI.

Table 4: Output

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>
Intercept	25.02718923	0.455419255	54.95417	7.03E-84
Consuming Times -per month (x)	0.175567281	0.051905652	3.382431	0.000985

The results presented in Table 4, indicate that the p-value for the monthly frequency of fast-food consumption is 0.0009, which is below the significance level of $\alpha = 0.05$. This demonstrates that changes in Body Mass Index (BMI) are significantly associated with an increase in the frequency of fast-food consumption. Furthermore, the positive correlation coefficient of 0.1756 suggests a direct relationship between the variables, indicating that higher monthly consumption of fast food among urban residents is associated with an increase in BMI. The relationship between monthly fast-food consumption and Body Mass Index (BMI) among urban residents underscores significant health implications. The scatter plot with the regression line (Figure 4) reveals a positive association between BMI and the monthly frequency of fast-food consumption, indicating that higher consumption is linked to increased BMI. The regression line confirms this trend, suggesting a measurable connection between dietary habits and weight outcomes. These findings imply that frequent fast-food consumption contributes to negative health outcomes, including overweight, obesity, diabetes, and cardiovascular conditions. While external factors such as genetics, physical activity, and other lifestyle choices also influence health, the statistical analysis highlights the significant impact of fast-food consumption on BMI.

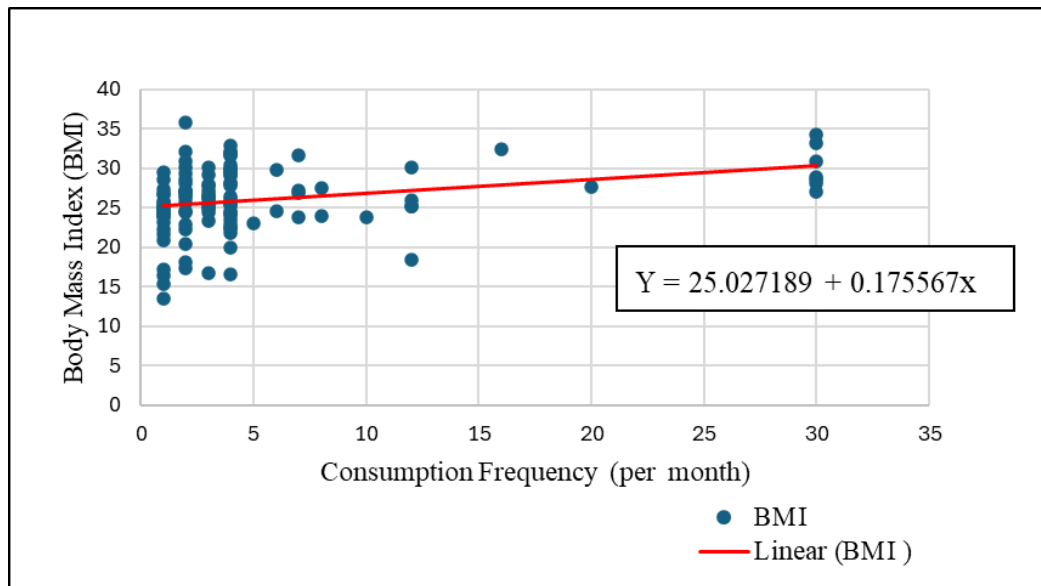


Figure 4: Scatter Plot with Regression Line: Monthly Fast -Food Consumption Frequency and Body Mass Index (BMI)

From the perspective of the Human Disease Ecology (HDE) model, these results reflect the interaction of environmental, behavioural, and biological factors. Environmentally, the Wattala–Mabola urban area represents a highly accessible fast-food environment, with numerous outlets located near residential settlements, schools, and commercial zones. This urban food landscape functions as an ecological driver that encourages frequent consumption of energy-dense, nutrient-poor foods, thereby shaping dietary behaviours in ways that contribute to weight gain.

The findings of this study can be interpreted through the lens of the Human Disease Ecology (HDE) model, which situates health outcomes within a broader ecological context. The urban food environment in Wattala–Mabola, characterized by a dense concentration of fast-food outlets, functions as an environmental factor that facilitates frequent consumption. Lifestyle practices, including convenience-driven eating, taste preferences, peer influence, and time constraints, represent behavioural factors that interact with individual biological processes, such as metabolism and susceptibility to obesity-related conditions, to influence disease risk. The positive relationship identified through regression analysis between monthly fast-food consumption and Body Mass Index quantitatively reflects this ecological interaction, emphasizing that the health impacts of fast-food consumption are shaped by the interplay of environmental, human activities, and biological determinants.

Supporting this, interviews with health officials, government officers, and members of the public revealed multiple social impacts of increased fast-food consumption in the Wattala–Mabola Urban Council area. These impacts were broadly categorized into physiological health disorders, psychological health effects, addiction and youth behaviour, effects on family and cultural practices, peer group preferences, and lifestyle changes. Together, the quantitative and qualitative findings illustrate that fast-food consumption is not merely a dietary habit but a socio-ecological phenomenon, where the urban environment, social behaviours, and individual biology collectively shape health outcomes. This integrated perspective underscores the need for interventions that address both personal choices and the broader social and environmental contexts influencing dietary behaviour.

▪ Physiological Health Disorders

Health officials consistently highlighted that frequent fast-food consumption contributes to a range of non-communicable diseases. These include overweight, obesity, diabetes, digestive disorders, high cholesterol, and nutrition-related diseases (*Respondent 1*). In particular, school students were noted to be increasingly affected by overnutrition and malnutrition, with a notable proportion exhibiting

overweight or obesity (*Respondent 2*). Respondents also emphasized that unhealthy ingredients in fast foods, such as high levels of sugars, refined carbohydrates, preservatives, colorants, and monosodium glutamate, are linked to chronic health conditions, including diabetes, cancer, and bone-related disorders (*Respondents 1 and 2*).

▪ **Psychological Health Disorders**

Interviewees reported that excessive fast-food consumption also has psychological implications, particularly among children and youth. These include increased fatigue, reduced engagement in learning, decreased physical activity, and poor eating habits, including avoidance of nutritious home-cooked meals (*Respondents 1 and 9*). In some cases, high body weight resulting from frequent fast-food consumption was associated with negative self-perception, stress, and mental health issues such as depression (*Respondents 2 and 8*).

▪ **Addiction and Youth Behaviour**

The interviews highlighted that fast food has become addictive among children and youth due to its taste, convenience, affordability, and visual appeal. Many parents also encourage fast-food consumption for convenience and as a symbol of modernity (*Respondents 1 and 2*). Additionally, fast-food vendors strategically target the preferences of young consumers, offering foods with attractive colors, shapes, and flavors, reinforced through advertisements and media exposure, further fostering consumption habits (*Respondent 3*).

▪ **Impact on Family and Cultural Practices**

Frequent fast-food consumption has disrupted traditional family practices. Respondents noted that family mealtimes, which once encouraged interaction and bonding, are now replaced by individual consumption of fast foods (*Respondent 6*). Additionally, peer influence and economic pressures sometimes lead children to engage in dishonest behaviours to obtain fast food, contributing to cultural degradation and a decline in traditional food consumption (*Respondents 13 and 19*).

▪ **Peer Group Preferences**

Fast food has emerged as a social activity among youth, particularly within peer groups. Respondents emphasized that consumption is often associated with entertainment and socializing, reinforcing the trend as a marker of modern youth culture (*Respondents 13 and 20*).

▪ **Impact on Lifestyle**

Finally, interviewees indicated that urban lifestyles, characterized by busy schedules and limited time for home cooking, contribute to higher fast-food consumption. Compared to rural residents, urban dwellers are more likely to rely on fast food for convenience, reflecting lifestyle-driven dietary patterns (*Respondents 6 and 17*).

Fast-food consumption in the Wattala–Mabola Urban Council area has far-reaching social implications, influencing health, behaviour, and cultural practices in urban communities. It is associated with both physiological and psychological health risks, including overweight and obesity, as well as addictive eating habits, particularly among youth. At the same time, it affects family dynamics and peer interactions, contributing to shifts in meal routines, reduced home-cooked meals, and broader lifestyle adaptations. These changes reflect not only local patterns but also global trends, highlighting how modern urban diets can shape social norms, cultural continuity, and public health landscapes in ways that extend beyond individual choice.

From a sustainable urban development perspective, the findings indicate that the rapid expansion of fast-food outlets in the Wattala–Mabola Urban Council area reflects an urban food environment driven primarily by convenience and commercial efficiency rather than long-term social sustainability. While increased accessibility supports fast-paced urban lifestyles, frequent fast-food consumption contributes to unhealthy dietary patterns, rising BMI levels, and increasing public health risks, raising concerns aligned with **SDG 3 (Good Health and Well-being)** and **SDG 12 (Responsible Consumption and**

Production). The observed decline in traditional food practices and family-based meals further highlights challenges related to cultural continuity and social cohesion, which are central to **SDG 11 (Sustainable Cities and Communities)**. These findings suggest that sustainable urban development in Sri Lanka must prioritize socially supportive food environments that promote healthy eating behaviors, preserve cultural food traditions, and strengthen community well-being alongside urban growth.

5.2 Economic Impacts of Fast-Food Consumption

The economic impacts of fast-food consumption in the Wattala–Mabola Urban Council area are multifaceted, reflecting both positive contributions to the urban economy and negative pressures on households. As shown in Figure 5, 79.3 percent of respondents indicated that fast-food businesses contributed to job creation, 66.4 percent noted their role in supporting the urban economy, 89.7 percent associated them with industrial growth, and 81.9 percent recognized the generation of tax revenue, particularly through restaurants and government collections.

At the same time, respondents highlighted several adverse economic consequences. These include financial pressures on low-income families (94 percent), rising health care costs (94.8 percent), inflation in household budgets (89.7 percent), negative impacts on local businesses (87.9 percent), economic inequality (89.7 percent), reduced productivity (77.6 percent), and environmental costs (86.2 percent). Notably, the increase in health care costs emerged as a particularly significant concern among urban dwellers, reflecting the broader socio-economic burden associated with fast-food consumption.

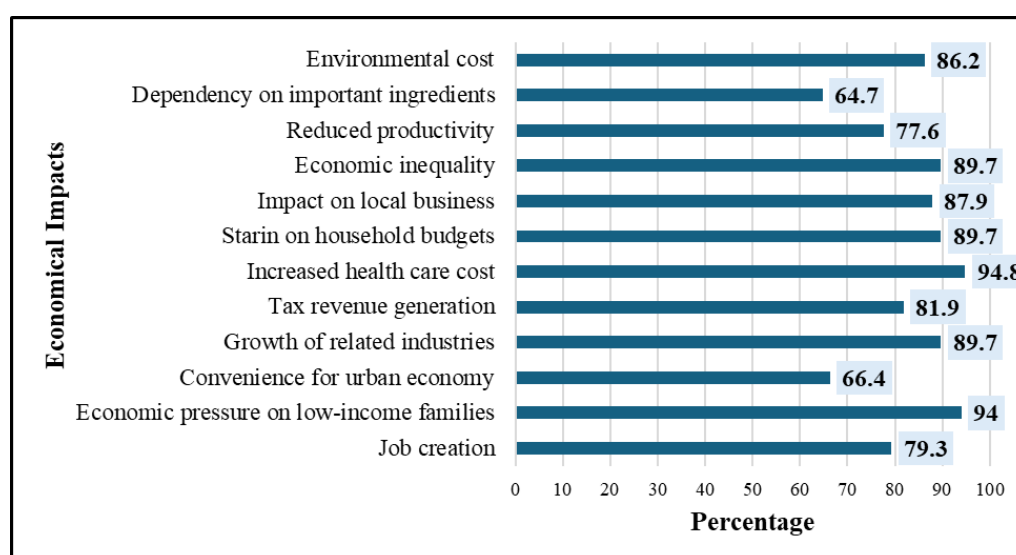


Figure 5: Economic Impacts of Fast-Food Consumption in Wattala-Mabola Urban Council Area

The influence of fast-food consumption on the monthly expenditure of urban residents reflects its broader economic burden at the household level. **Figure 6** shows that 69% of respondents reported a slight increase in their monthly spending due to fast-food purchases, 13.8% reported a significant increase, and 17.2% indicated no noticeable impact. Only a small proportion stated that fast food consumption did not affect their monthly expenditure

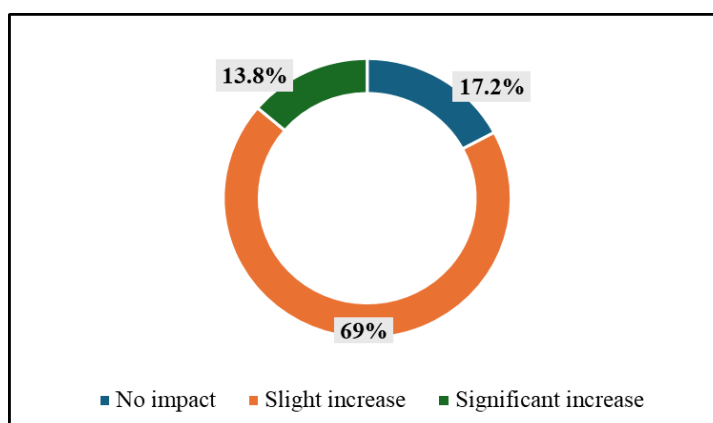


Figure 6: Impact of Fast-Food Consumption on Monthly Household Expenditure in the Wattala–Mabola Urban Council Area

Overall, the majority of urban dwellers experience at least a slight financial impact, highlighting the role of fast-food consumption in shaping household economic behaviour.

Interviews with respondents further elaborated on these economic impacts, which can be thematically categorized into health costs, family income, and food accessibility.

▪ **Health Costs**

Respondents noted that frequent consumption of fast food, which is relatively expensive, not only increases household spending but may also contribute to future health-related expenses due to diet-related diseases (*Respondent 5*).

▪ **Family Income**

Financial pressures were particularly pronounced among low-income households. While urban residents with higher incomes can afford fast food, those with limited earnings often experience economic strain when attempting to maintain such dietary habits. For example, some government officials with modest salaries tend to avoid fast food due to cost, whereas others face financial difficulties from regular consumption despite limited income (*Respondent 8*). Preparing meals at home was highlighted as a cost-effective alternative that ensures adequate nutrition, while reliance on fast food increases expenditure and associated health costs (*Respondent 13*).

▪ **Food Accessibility**

The proximity of fast-food outlets also influences consumption patterns and household spending. Respondents explained that easy access to restaurants encourages more frequent purchases, which can unintentionally raise monthly expenses (*Respondent 10*).

Fast-food consumption in the Wattala–Mabola Urban Council area presents a complex economic landscape, with both benefits and costs shaping household and urban-level outcomes. While the industry contributes to employment, industrial growth, and public revenue, it also generates financial pressures for urban residents, particularly among low-income households. Increased spending on fast food, rising healthcare costs associated with diet-related illnesses, and inflation in household budgets highlight the broader economic trade-offs of convenience-oriented urban diets. These patterns align with global observations that, although fast-food industries can stimulate economic activity, the associated household-level financial burdens and health expenditures represent significant long-term challenges to inclusive and equitable urban development.

From a sustainable resource management and urban development perspective, the economic impacts of fast-food expansion in the Wattala–Mabola Urban Council area extend beyond employment creation

and revenue generation to include significant environmental costs that place additional pressure on urban resources. While the fast-food sector contributes to industrial growth, jobs, and tax income, these benefits are offset by rising household expenditure, increasing healthcare costs, and financial strain on low-income families, raising concerns related to **SDG 8 (Decent Work and Economic Growth)** and **SDG 3 (Good Health and Well-being)**. Importantly, fast-food consumption is closely associated with the extensive use of single-use plastics, shopping bags, and packaging materials, along with unstructured waste disposal practices, which increase urban council waste management costs and reduce resource efficiency. These environmental externalities represent hidden economic burdens for urban authorities and households, aligning with **SDG 12 (Responsible Consumption and Production)** and **SDG 11 (Sustainable Cities and Communities)**. Overall, the findings suggest that sustainable urban development in Sri Lanka requires economic planning that accounts not only for market growth but also for environmental management costs, equitable resource use, and long-term urban resilience.

6. Conclusion

This study demonstrates that fast-food consumption in the Wattala–Mabola Urban Council area represents a significant socio-economic challenge embedded within the dynamics of urbanization in Sri Lanka. Rather than being a simple matter of individual dietary choice, fast-food consumption reflects broader transformations in urban lifestyles, food accessibility, cultural practices, and economic conditions. These interconnected factors collectively shape health outcomes, household well-being, and the sustainability of urban communities.

The findings indicate that frequent fast-food consumption is strongly associated with adverse health outcomes, particularly among children and youth, and contributes to the gradual erosion of traditional dietary practices and family-based food routines. Although convenience and diversity of food choices are recognized benefits, they are increasingly outweighed by rising physical and psychological health risks. The statistically significant relationship observed between fast-food consumption and Body Mass Index further underscores its relevance as a public health concern within urban settings, even when accounting for external lifestyle and socio-economic factors.

From an economic perspective, fast food plays a dual role in urban development. While it contributes to employment, industrial growth, and public revenue, it simultaneously imposes financial pressures on households through increased food expenditure and healthcare costs. These burdens are felt most acutely by low-income families, highlighting issues of equity and inclusiveness in urban economic systems. Additionally, the expansion of fast-food outlets poses challenges to local food economies, raising concerns about the long-term resilience of traditional and small-scale food sectors.

Interpreted through a sustainable urban development framework, the results emphasize the need to align urban food environments with public health, cultural sustainability, and social equity objectives. The Human Disease Ecology perspective illustrates how environmental exposure, behavioral patterns, and biological responses interact within urban contexts to influence disease risk and socio-economic outcomes. Addressing the impacts of fast-food consumption therefore requires integrated and multi-sectoral interventions, including nutrition education, urban planning regulations, promotion of healthier food environments, and support for culturally rooted and locally sourced food systems.

In conclusion, this research provides evidence that sustainable urban development in Sri Lanka must extend beyond infrastructure and economic growth to include food systems and lifestyle-related health considerations. By integrating public health, social well-being, and economic sustainability into urban planning and policy frameworks, Sri Lankan cities can move toward more resilient, equitable, and health-supportive urban futures.

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