नवदृष्टि
A Multidisciplinary Research Journal

Navdrishti: A Multidisciplinary Research Journal

Volume 1, Issue 1 February 2026

Sectorial Analysis of Nutritional Intake by Women in Greater Mumbai

Dr. Amrita Aggarwal
Asst. Professor, Nagindas Khandwala College, Mumbai
amrita@nkc.ac.in

ABSTRACT

In today's diverse society, understanding the intricate relationship between eating habits and nutrition across different population sectors is crucial for promoting overall health and well-being. This research aims to investigate the relationship between portion sizes and dietary habits among individuals of diverse cultural backgrounds, analyze the food choices on nutritional intake and health effects of different religious groups/cultures, compare the nutritional intake of traditional food and modern food and modern food, explore the factors that influence the selection of food or restrict food and to assess the awareness of different nutritional intakes required for healthy life. The research methodology includes a systematic collection of secondary and primary data. The secondary data is referred to from time to time to compile a literature review and the primary data is collected using a structured questionnaire prepared in Google Forms using survey method. The sample size is 1014 randomly selected women across Greater Mumbai. The data is processed using MS-Excel and IBM SPSS. The findings depict that 67.83% of the respondents eat a balanced nutritious meal while others do not. The main obstacle in the nourishment is lack of income, ignorance, family restrictions and habit. The study strongly recommends that there must be awareness among women on the importance of balanced nutrition as it is a human right along with provision of some food items with the help of NGOs to the underprivileged women. The study concludes by highlighting the importance of nutrition for the growth and development of the society irrespective of race, religion, caste, gender and income.

Keywords: *Women, Nutrition, Unbalanced, Underprivileged, Human Right.*

INTRODUCTION

In today's diverse society, understanding the intricate relationship between eating habits and nutrition across different population sectors is crucial for promoting overall health and well-being. By delving into the various factors that influence dietary choices, such as age, gender, socioeconomic status, cultural background, and geographical location, we can gain valuable insights into designing targeted interventions to enhance nutritional outcomes. This research aims to explore how these sectorial influences impact people's (especially women) eating habits and nutritional intake, ultimately contributing to the development of effective

strategies to the development of effective strategies to improve female health and address nutrition-related challenges in diverse communities.

REVIEW OF LITERATURE

A study on consumer decision-making regarding food products in the USA and Japan identified various factors influencing food choices, including cultural values, eating habits, family dynamics, tastes, and preferences. The research developed a multiple regression model using meat and cereal expenditures as predictors and age, number of earners, and female participation in the workforce as outcomes. The findings showed that age doesn't significantly impact meat or cereal expenditure in the USA, the number of earners doesn't significantly influence meat expenditure in Japan but does affect cereal expenditure, and female participation in the workforce in the USA has a marginal impact on predicting meat and cereal expenditures, this study highlights the complexities of consumer food choice decisions and the variations between countries and cultures (Nelson, 1992).

In the study "Determinants of Food Away from Home Consumption: An Update", researchers analyzed data from the 1987-1988 National Food Consumption Survey to identify the socio-economic and demographic characteristics of individuals who consume food away from home. Using logit analysis, they found that significant factors influencing food away from home consumption include race, Ethnicity, Employment status, Food stamp participation, Seasonality, Household size, Age, Income, Frequency of consumption. These characteristics were found to be significant determinants of food away from home consumption (Nayga and Capps, 1992).

Researchers developed a Food Choice Questionnaire to identify the underlying motives for food selection. Analyzing responses from 358 adults aged 18-87, they identified nine key motives health, mood, convenience, sensory appeal, natural content, price, weight control, familiarity and ethical concern. They also explored how these motives vary by sex, age, and income (Steptoe et. al., 1995).

Investigated the factors influencing dining out behaviour, including nutrition awareness. While nutrition factors had little impact on table service restaurant visits, individuals prioritizing nutrition were significantly less likely to frequent table service and fast-food restaurants compared to others (Binkley, 2006).

A study in New Delhi examined the diet and nutrition of adolescent girls in rural areas. The results showed that the girls primarily consumed cereals and dairy products, but had inadequate intake of essential food groups like green leafy vegetables (26-34g vs recommended 100g), other vegetables (26-34g vs recommended 100g), fats and oils (16g vs recommended value), fruits (3g vs recommended value), only cereal consumption was satisfactory, except in Assam. The study also found regional differences in food consumption, with all districts showing deficient intake values for most food groups, except cereals. The consumption of dairy products, fats, oils, sugar, and fruits was particularly low across regions. This study highlights the need for improved nutrition and dietary habits among rural adolescent girls, with a focus on increasing consumption of essential food groups (Chaudhuri Foundation, 2014).

RESEARCH OBJECTIVES

- To analyze the food choices on nutritional intake and health effects of women from various sectors of the society
- To explore the factors that influence the selection of food or restrict food among women
- To give recommendations to improve the prevailing conditions

RESEARCH HYPOTHESIS

H1= there is a relationship between income and food habits
H1o= there is no relationship between income and food habits
H2= there is gender-based discrimination in terms of food availability in the households
H2o= there is no gender-based discrimination in terms of food availability in the households

RESEARCH METHODOLOGY

Coverage

This investigation centers on Greater Mumbai, analyzing its 24 administrative wards which span both the Mumbai District and Mumbai Suburban District. Serving as the capital of Maharashtra and a crucial financial and industrial center for India, Greater Mumbai is a metropolitan area of high significance. Geographically, it stretches approximately from 18° to 19° East in latitude and from 72.82° to 73.00° North in longitude. The region is situated roughly between. Its boundaries are defined by the Ulhas River to the north, Thane Creek to the east, and the Arabian Sea enveloping the south and west coasts. Administratively, the city is overseen by the Municipal Corporation of Greater Mumbai (MCGM) and is notable as one of India's largest municipal bodies by area, encompassing 437.71 square kilometers. Due to the city's distinct elongated shape, its transportation infrastructure is heavily weighted toward north-south routes, resulting in fewer major connections running east-west.

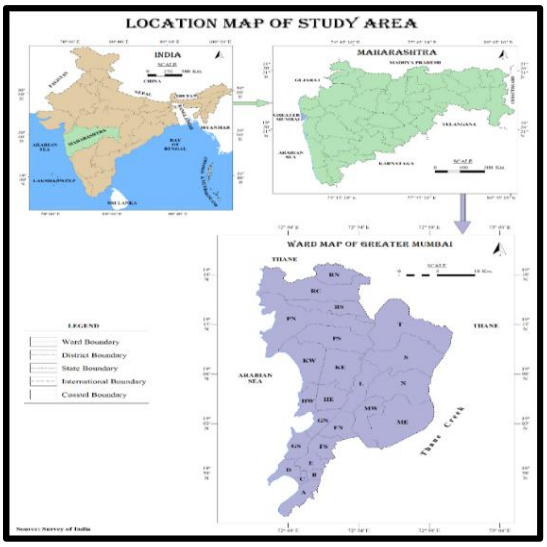

Figure 1

DATA COLLECTION AND ANALYSIS

The present research is based on both secondary as well as primary data. The secondary data is collected from various published articles and research papers in books, journals, newspaper articles and official websites. Secondary data collection has helped to compile review of literature and place the topic in place. It has helped in bringing out the research gaps. The primary data is collected from 150 women selected from various financial backgrounds using stratified sampling. 50 randomly selected women have been selected from three financial backgrounds viz. low, medium and high. It has enabled for a comparative analysis between women from various financial sectors. The tool used for data collection is a close ended questionnaire prepared in Google Forms and the method used is survey method. The data has been stored, processed and analyzed using MS-Excel, IBM SPSS and QGIS software.

RESULTS, ANALYSIS AND DISCUSSION

It is observed that majority of the respondents are of age between 18 to 30. The least is 50 and above which is just a random occurrence. However, it helps in understanding other aspects in connection to age.

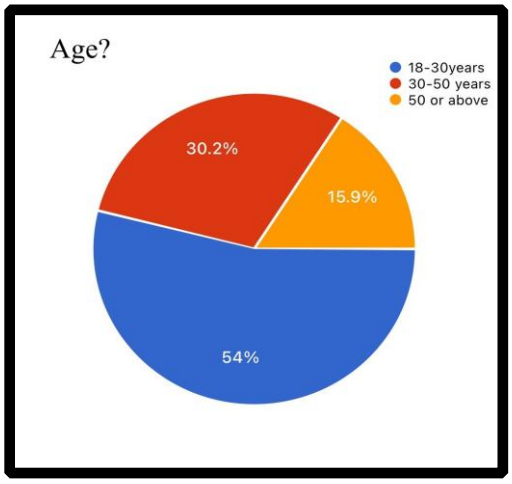

Figure 2

The following pie chart shows the religion of the respondents and a maximum number of respondents belong to Hinduism, followed by Islam, Christianity and others. With the following pie chart, it can be analyzed that the major respondents are women majorly from Hindu religion between the age range of 18 years to 30 years.

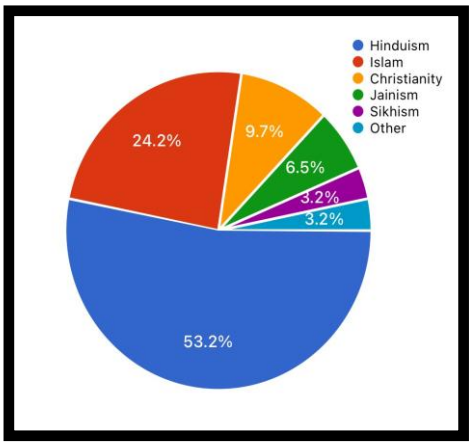

Figure 3

It is observed in the following pie chart that the majority of the respondents were employed somewhere, some had their own business while some were daily wages labour as well followed by unemployed and home makers, while the majority also showed that they are into some other occupation. The number of respondents of age 50 years and above plus retired are comparatively less than others.

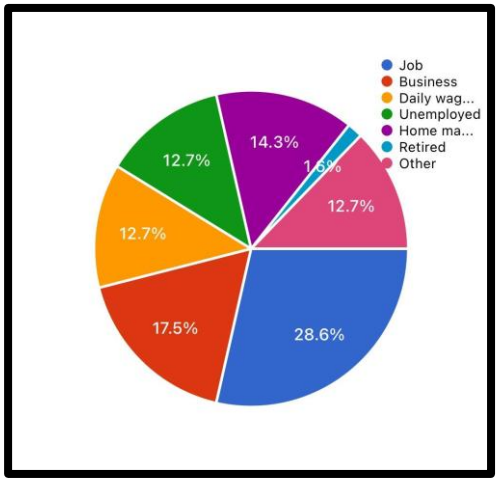

Figure 4

It is observed that majority has their annual income less than 5 lakh, the reason for such can be that the respondents are majorly from different backgrounds such as employees or daily wage labour which may not fetch them a handsome salary. The second highest is salary range between 5lakh-10lakh, the respondents might have high paying jobs or settled business. As the salary ranges per annum increased the number of respondents decreased.

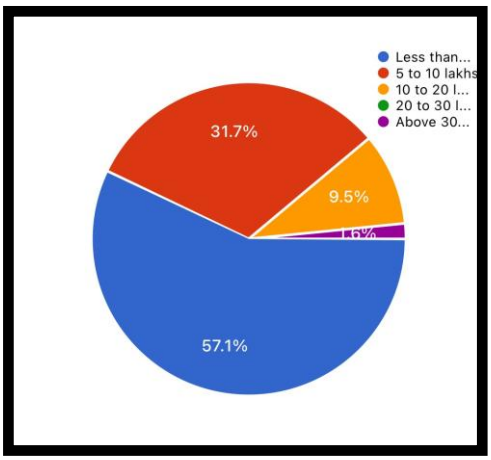

Figure 5

The following bar graph shows the breakfast preferences of the respondents. It is observed that Tea, Biscuits and poha upma/remain constant irrespective of any income, religion, or age group the reason can be that it's the common and easiest breakfast which is less time-consuming. The women who prefer paratha / omelette may be health conscious or prefer something heavy to eat for breakfast. Women who prefer oats and cornflakes are comparatively less if compared to others it can be the taste preference of the women or the reason may include that it's an expensive thing to eat daily therefore the women who have oats and cornflakes are less.

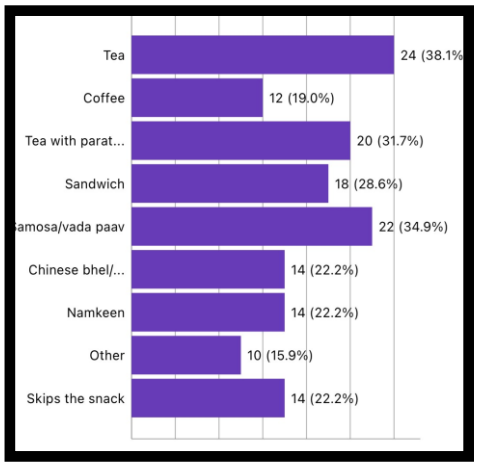

Figure 6

It is observed that majority of the women prefer having "daal chawal" for their lunch as its the staple food for everyone. Some women prefer roti sabzi as well. Nonvegetarian food is not one of the most preferred, but it is preferred more than fast food or other food. Some women also prefer to skip lunch this can be due to health reasons or the busy schedule or habits.

The following bar graph shows the snacks preference in evening. Tea is the constant beverage that is preferred by almost everyone. Many women prefer paratha with tea as well. Rest other women prefer samosa/ vada paav / namkeen which is the light source snacks not too heavy. Many women prefer to skip snacks, it can be due to health reasons/ busy schedule or habits.

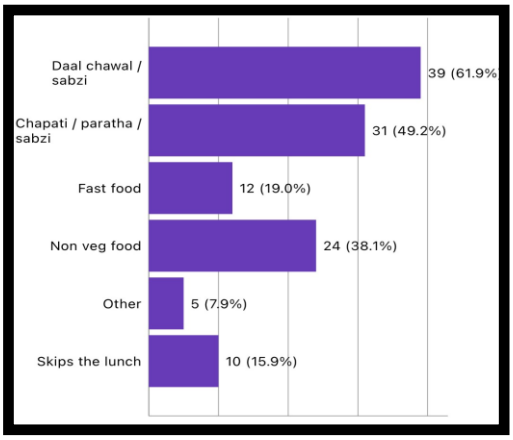

Figure 7

The following bar graph shows food preferences for the dinner. Majority of the women prefer "home cooked", it can be either vegetarian or non-vegetarian. Some women also prefer restaurant food but that won't be possible on regular basis so the number of respondents are less. Rest other either prefer Jain food or skips the dinner for which the reason can be that they have such food habits or due to health reasons.

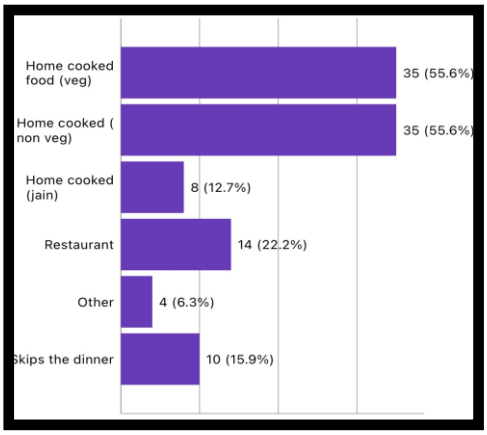

Figure 8

This pie chart shows the food preferences of authentic or the fast food (which can be either from street or restaurant or home cooked). Women preferred Authentic Home Cooked food majorly if compared to others options. Some women also prefer home cooked fast food which is again a healthy option if compared to the remaining one. Very few women prefer authentic and fast food from restaurants this can be due to health reasons or hygiene reasons.

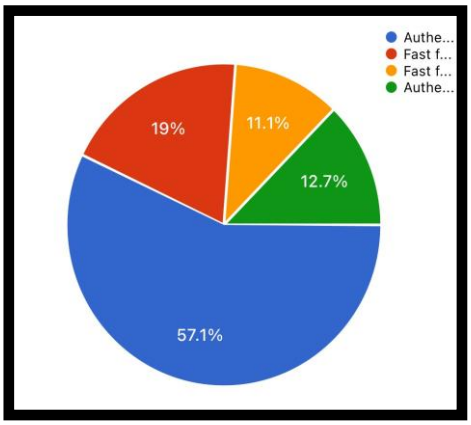

Figure 9

The following pie chart shows the food preferences of respondents based on traditional food or modern food. Majority of respondents finds that modern food is less tasty than traditional food. Many women chose option for both are tasty. Many women chose none of the above it can be due to some other taste preferences.

The following pie chart shows that majority of women found authentic food tastier than the fast food. Many women also found both food is tasty. Few women found that only fast food is tasty this can be due to taste preference. Many women chose “can’t say” the reason can be such that they might be confused or didn’t wish to choose any of the above option.

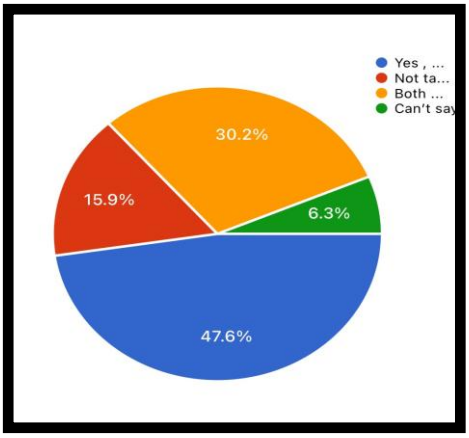

Figure 10

It is observed that the responses which shows that almost 60% women have some or the other food which is restricted in their lives. There can be many reasons like health issues, religious prohibition, taste preferences etc. The other women who voted no might be okay with every food.

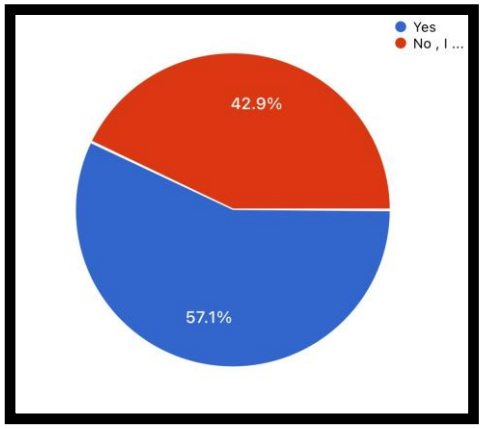

Figure 11

The following bar graph shows that majority of the respondents rated their health in scale of "3", the reason can be that they may think their health to be somewhere between healthiest to unhealthy. Women who chose scale 1 may have some health issues. Women who chose scale 5 may not suffer from any health issues.

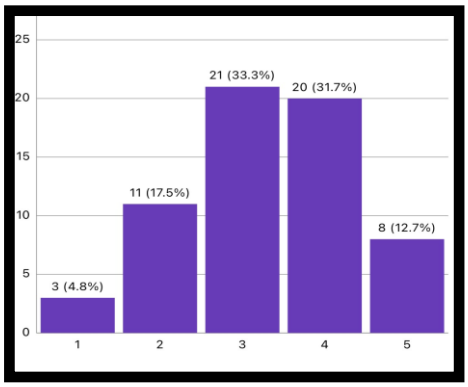

Figure 12

The following bar graph shows the reasons for restrictions of food of respondents. Majority women have reasons that their religion doesn't allow some food for example Muslims do not have pork, Hindus are prohibited from beef, etc. The women who eat everything have chosen the option "not applicable". Many women have other reasons and taste preferences as well.

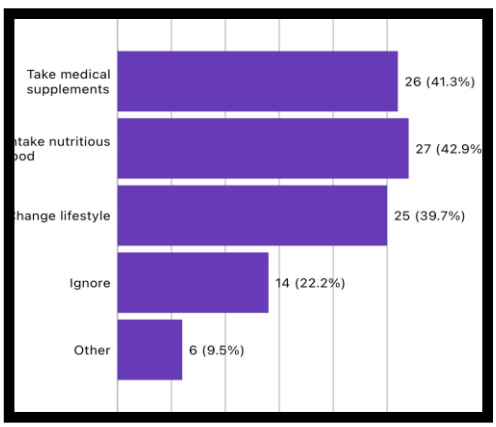

Figure 13

It is observed when respondents were asked about the ways to tackle a deficiency in body the majority women chose natural and healthier way to combat the deficiency instead of choosing medical supplements. There are also women who chose to change the lifestyle. Few women chose to ignore the reason can be they don't find it important until something serious.

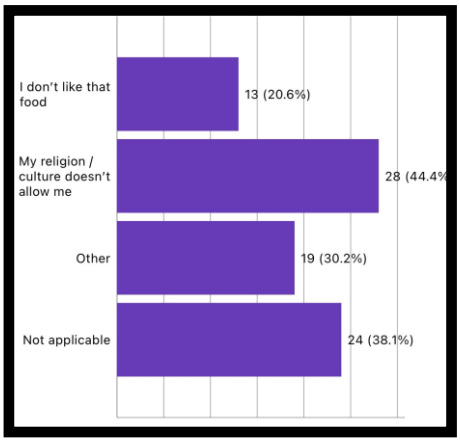

Figure 14

The following pie chart represents the agreement or disagreement of respondents based on food preferences related to culture and religion. Many women think religion affects food preferences while others are maybe unsure about it. While others strongly disagree.

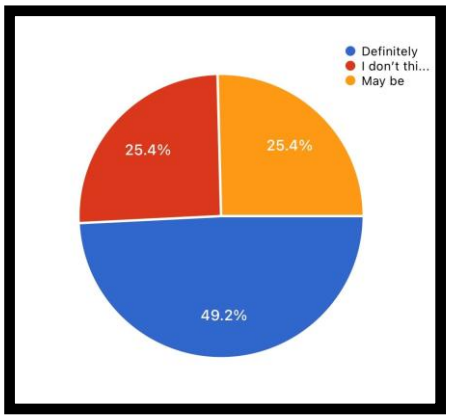

Figure 15

It is observed that around 50% respondents feel that income affects the food whereas few are either unsure about it or strongly disagree on this.

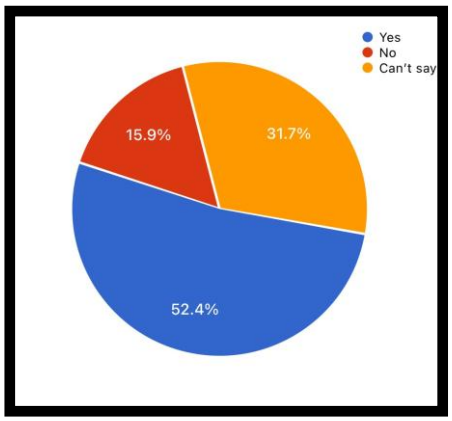

Figure 16

H1= there is a relationship between income and food habits
H1o= there is no relationship between income and food habits

The value of Chi-square (r^2) is 2.85 and the value of p at 99% confidence for 9 degrees of freedom is 0.96 which suggests that the value of r is greater than the p value. This implies that the null hypothesis is rejected with 99% confidence. This further indicates that there is a relationship between income and food habits which means that the higher the income, better will be the food habits and vice versa. The higher income group will be able to include milk and dairy products in their diet, eat better quality vegetables and use olive oil and other healthier products which are costlier too.

H2= there is gender-based discrimination in terms of food availability in the households
H2o= there is no gender-based discrimination in terms of food availability in the households

The value of Chi-square (r^2) is 9.02 and the value of p at 99% confidence for 8 degrees of freedom is 0.34 which suggests that the value of r is greater than the p value. This implies that the null hypothesis is rejected with 99% confidence. This further indicates that there is gender-based discrimination in terms of food availability in the households which is an age-old practice in the Indian society. The women also do not oppose as they find it normal and here, income doesn't make a difference. In fact, if the women are homemakers, the situation is worse.

RECOMMENDATIONS

- Implementing nutrition education programs that teach women about the importance of a balanced diet, essential nutrients, and healthy cooking practices can empower them to make better dietary choices.
- Providing supplements such as iron, folic acid, calcium, and multivitamins can help address common deficiencies among women, particularly during pregnancy and lactation.
- Strengthening healthcare infrastructure to ensure regular health check-ups, early detection of nutritional deficiencies, and proper medical advice is crucial. This includes improving access to maternal and child health services.

- Enhancing women's economic status through vocational training and employment opportunities can increase their purchasing power and ability to afford nutritious foods.
- Initiatives like midday meal schemes for pregnant and lactating women, food subsidies, and targeted food distribution programs can help ensure that women receive adequate nutrition.
- Mobilizing community support and involving local leaders and influencers in nutrition campaigns can help shift cultural norms and practices towards better nutrition for women.
- Advocating for and implementing policies that support women's nutrition, such as maternity leave, breastfeeding support, and food fortification programs, can create an enabling environment for improved nutrition.
- Conducting research to identify the specific nutritional needs and challenges faced by women in different regions and monitoring the effectiveness of nutrition programs can help refine and improve strategies over time.

CONCLUSION

It is concluded that Nutrition for women in India remains a critical issue, deeply intertwined with cultural, socioeconomic, and educational factors. Despite progress in various health indicators, a significant portion of women, particularly in rural areas, continue to suffer from malnutrition and anemia. Traditional dietary practices, limited access to quality healthcare, and a lack of awareness about balanced nutrition contribute to these challenges. Women often prioritize the nutritional needs of their families over their own, leading to deficiencies in essential nutrients such as iron, calcium, and vitamins. The government and various NGOs are making concerted efforts to address these issues through programs focused on maternal and child health, but there is a pressing need for more widespread education and empowerment initiatives to ensure that women receive the nutrition they need for their well-being and that of their families.

LIMITATIONS AND IMPLICATIONS

The limitations are as follows:

- The research has struggled to achieve a fully representative sample that includes women from all socio-economic backgrounds, age groups, and sectors within Greater Mumbai.
- Accurate data collection on dietary intake has been difficult due to reliance on self-reported information, which may be affected by recall bias or social desirability bias.
- Greater Mumbai's population is highly diverse, with various cultural, religious, and regional dietary practices. Capturing the full scope of this diversity in the analysis is challenging, leading to potential oversights in the research.

The implications are as follows:

- The research could provide valuable insights for policymakers focused on women's health and nutrition in urban settings. It could lead to targeted policies aimed at improving the nutritional intake of women, particularly in sectors where deficiencies are most pronounced.

- Findings from the study could inform public health interventions designed to address nutritional gaps among women working in different sectors, particularly those in the informal or unorganized labor market, where nutritional intake may be lower.
- The research may highlight the need for workplace-based nutrition programs or food security initiatives, especially in sectors where women are more likely to face nutritional challenges due to long working hours, inadequate food breaks, or low wages.

BIBLIOGRAPHY

- Anand, R. (2011). A study of determinants impacting consumers' food choice with reference to the fast-food consumption in India. Society and Business Review, 6(2), 176–187. https://doi.org/10.1108/17465681111143993
- Binkley, J. K. (2006). The effect of demographic, economic, and nutrition factors on the frequency of food away from home. The Journal of Consumer Affairs, 40(2), 372–391. Wiley.
- Choudhary, K., Shekhawat, K., & Kawatra, A. (2015). A cross-sectional study to assess nutritional status of adolescent girls at a government senior secondary girls' school at Bikaner, Rajasthan. Indian Journal of Community Health, 26(3), 318–321.
- Nayga, R. M., & Capps, O. (1992). Determinants of food away from home consumption: An update. Agribusiness, 8(6), 549–559. John Wiley & Sons, Ltd.
- Steptoe, A., Pollard, T. M., & Wardle, J. (1995). Development of a measure of the motives underlying the selection of food: The food choice questionnaire. Appetite, *25*(3), 267–284. https://doi.org/10.1006/appe.1995.0061