

Knowledge, Attitudes, And Practices (KAP) Towards Nutrition Among Working Women Through Mass Media

Sukriti Kumari¹, Dr. Kumari Rupam²

¹PhD Scholar, Patna University, Patna, Bihar

² Professor, P.G Department of Home Science, Patna University, Patna, Bihar

ABSTRACT

Aim- To identify gaps between awareness and actual behavior.

This finding will guide targeted nutrition education with the help of media literacy and its interventions.

In today's digital era, mass media plays a pivotal role in shaping the nutritional knowledge, attitudes, and dietary practices of working women along with a demographic balance of professional duties and family responsibilities. This cross-sectional study surveyed 200 working women aged 25 to 50 to evaluate how mass media influences their nutrition-related behaviors. Demographically, 25% of respondents were aged 31–35 and another 25% aged 41–45, with 97% married and predominantly Hindu (95%). BMI classifications shown 37.5% within normal range (18.5–24.9), 32.5% overweight, and 20% obese (>30). Education levels also varied, with 45% graduates and 9% postgraduates.

Nutritional knowledge was relatively high: 197 participants correctly identified the role of iron in hemoglobin formation, 171 participants recognized fruits and vegetables as a rich sources of vitamin and 189 acknowledged that milk and greens are rich in calcium. However, knowledge gaps were found, such as 51 respondents were unaware about the protective role of vitamin c against scurvy and 42 were uncertain about the importance of calcium in bone health. Attitudes toward nutrition was found largely positive; for example, 153 respondents agreed that moderate junk food intake can maintain health and 174 respondents emphasized on hygiene practices to be followed like covering cooked food. Nonetheless, actual nutrition and dietary practices showed discrepancies: 41% women never consumed fruits, 70% occasionally ate chocolates, and 59% abstained from traditional sweets like mithai, which indicates inconsistent translation of knowledge into behavior. Statistical analysis demonstrated that education is a significant factor influencing nutritional knowledge and hygiene awareness ($\chi^2 = 15.729$, $p = 0.046$), while age influenced select knowledge areas such as role of calcium ($\chi^2 = 17.458$, $p = 0.026$) and sources of vitamin A ($\chi^2 = 15.617$, $p = 0.048$). The study reveals the double-edged nature of mass media as both a vital educational tool and a source of unverified diet trends, contributing to the disconnect between awareness and practices.

Interpretation and conclusion: These findings emphasize Working women generally have good nutritional knowledge and positive attitudes, especially those with higher education. However, inconsistencies in dietary practices—like irregular fruit intake and frequent sweet consumption—indicate a gap between knowledge and behavior. Mass media serves both as an important source of information and a promoter of confusing diet trends.

Keywords: Mass media, Nutritional knowledge, Dietary practices, Working women, Media influence, Nutrition education

I. INTRODUCTION

In this digital age, mass media plays a significant and important role in shaping the behavior of society with respect to public health, particularly when it comes about nutrition and dietary practices¹. Mass media in the form of television, social media platforms, online articles, blogs, and influencers serve as key sources of information that can directly impact the way and practices of individuals, their understanding and acceptance for nutrition and health-related habits². Working women are having multiple responsibilities in and out which include making food choices for themselves and their families for which they are also influenced by these sources of mass media every now and then³.

Due to the demanding nature of professional and personal lives of working women, they frequently face time management challenges and suffer raised stress levels. As a result, these women are more likely to require quick, easily accessible information related to food and nutrition, which lead them turning out to mass media for guidance and appropriate advises⁴. This practice of working women, however, comes with both benefits and risks. Mass media can be a powerful tool for raising awareness about healthy eating habits, balanced diets, and lifestyle management. Educational campaigns, expert interviews, and government health messages broadcast through popular media channels can positively influence behavior and promote long-term wellness for the entire family members⁵.

In recent years, it has been seen that there is a significant rise in the consumption of foods considering health-related content through mass media, particularly among working women. Studies show that a majority of working women rely on digital platforms such as social media, online health blogs, and television programs to access information about nutrition and diet. According to recent surveys, over 70% of working women report using the internet as a primary source for dietary advice, with nearly half following health influencers or subscribing to fitness and nutrition-related pages on platforms like Instagram, YouTube, and Facebook⁷. The increased prevalence of diet trends and nutrition tips in mainstream media has led to greater awareness of health and wellness among this demographic data. However, it has also contributed to the widespread adoption of food faddism for dietary eating and unverified health practices as well. For instance, ketogenic diets, intermittent fasting, detox cleanses, and gluten-free regimens have seen a high popularity among the society, often driven more by mass media promotion than clinical or medical recommendation⁸.

While mass media is a prevalent and accessible tool for spreading health information among working women, its influence is a double-edged sword— which can simultaneously be empowering and potentially misleading as well for them⁹. It is important to understand the scope and impact of this prevalence for developing targeted public health strategies to improve the nutrition related awareness and promote media literacy¹⁰.

II. METHODOLOGY

This study was done by a cross-sectional quantitative survey design using a structured questionnaire, which was divided into two main sections: demographic information and Knowledge, Attitudes, and Practices (KAP) related to nutrition and media influence.

The sample consisted of 200 respondents, specifically working women between the ages of 25 and 50 years of age. A convenience sampling method was used to recruit participants from urban workplaces as well as through online platforms. Participants were eligible for the study as they were female, aged between 25 and 50 years, currently employed either part-time or full-time, regular users of mass media (such as television, internet, or social media), and willing to participate voluntarily in the study. Data was collected using a structured questionnaire administered to them both online and offline.

The questionnaire gathered information on age, marital status, body mass index (BMI), physical activity level, education level, media related consumption habits, and a knowledge score based on responses to nutrition-related questions (scored out of 10). The "Knowledge Score" was calculated based on the number of correct answers provided to questions on nutrition and mass media awareness.

Data analysis included descriptive statistics of the data such as mean and percentage to summarize the findings and obtain the results. Pearson correlation was applied to examine relationships between continuous variables. The analysis was conducted using Python programming language and Microsoft Excel software.

Ethical approval for the study was obtained from the institutional review board. Participants were assured of keeping the confidentiality of their information and about the protection of their privacy in reporting the findings.

Table 1.1 -Age of the respondents

Age of respondents		
AGE	N=200	%
25-30	30	15.0%
31-35	50	25.0%
36-40	40	20.0%
41-45	50	25.0%
46-50	30	15.0%

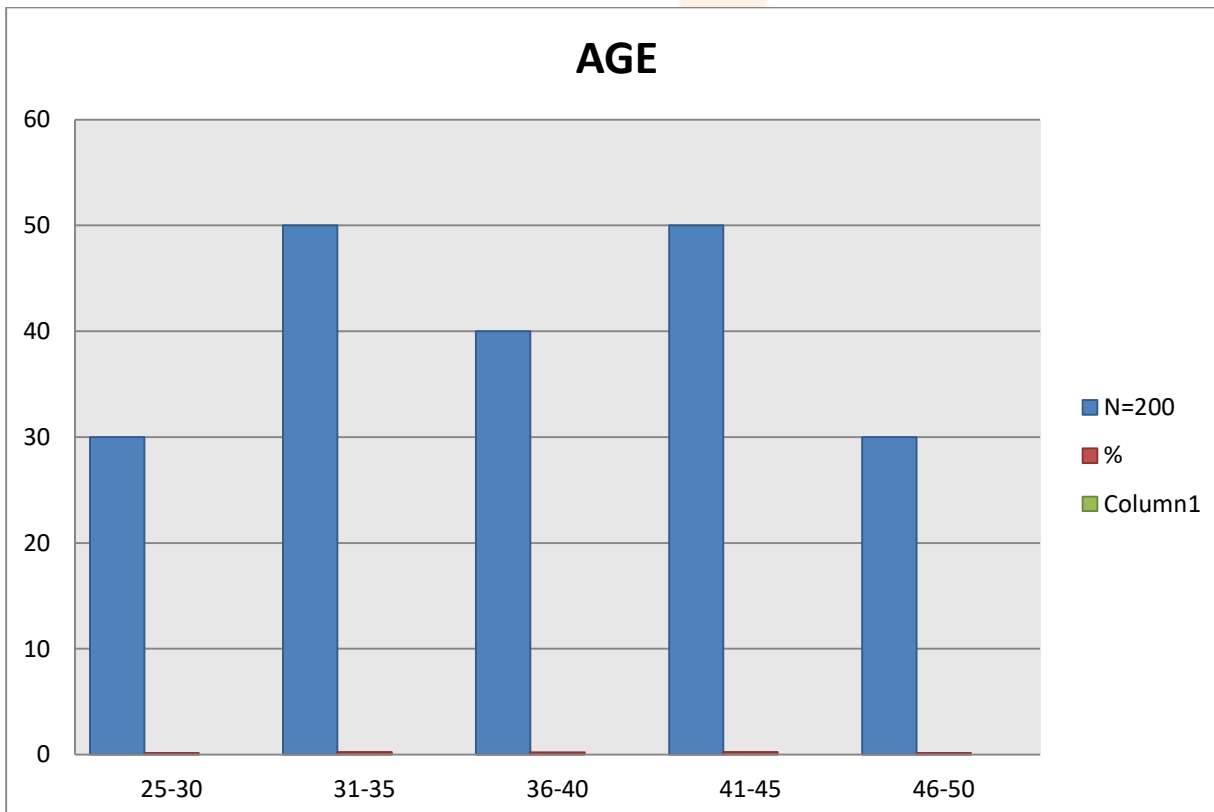


Fig1.1 Age of the respondents

Table 1.2. – Marital status of the respondents

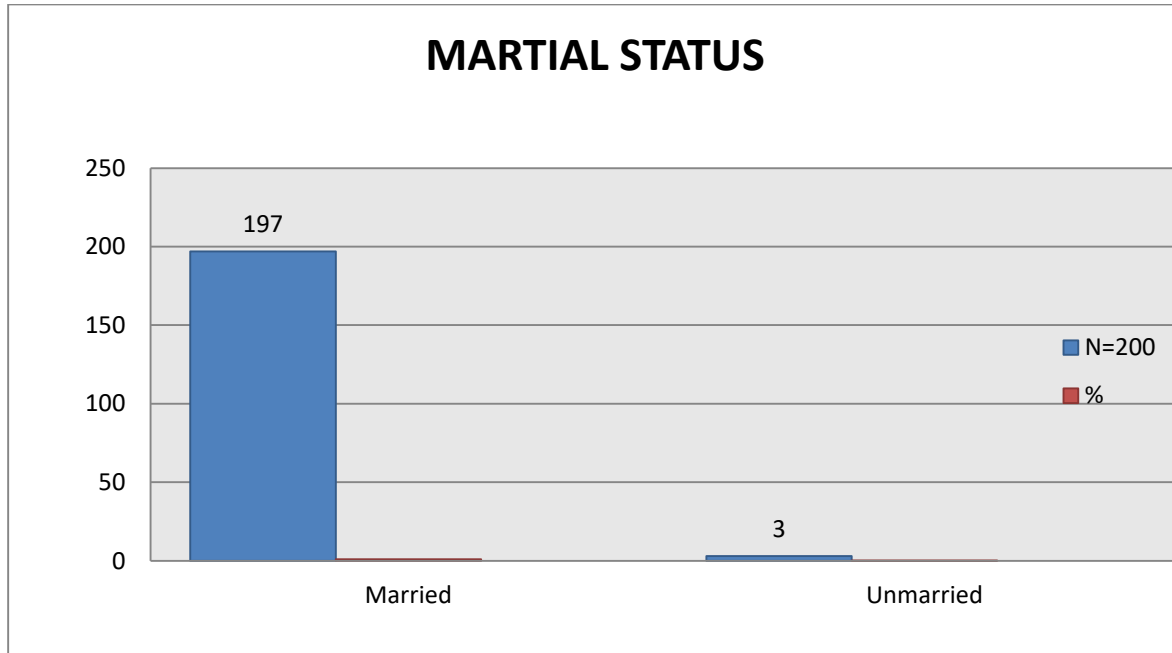


Fig. 1.2. – Marital status of the respondents

RELIGION

RELIGION	N=100	%
Hindu	190	95.0%
Muslim	6	3.0%
Christian	4	2.0%

MARITAL STATUS

MARITAL STATUS	N= 100	%
Married	197	97.0%
Unmarried	3	3.0%

Table 1.3 – Religion of the respondents

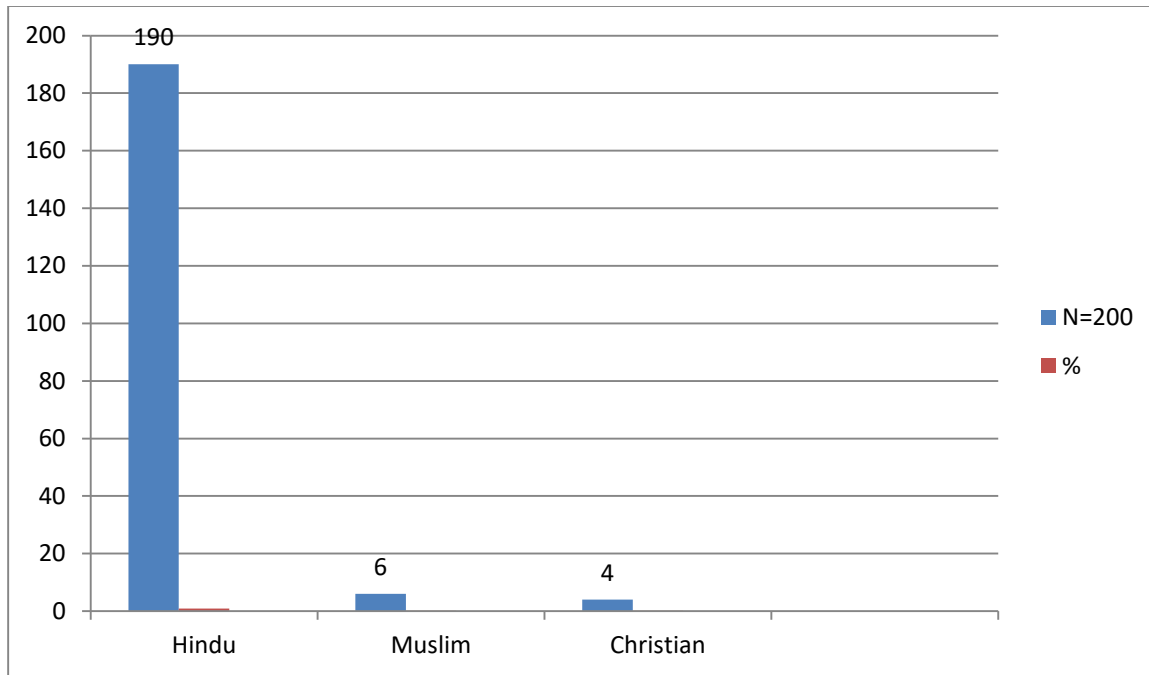


Fig 1.3 – Marital status of the respondents

BMI

BMI	N=100	%
>18.5	20	10.0%
18.5-24.9	75	37.5%
25-29.9	65	32.5%
30<	40	20.0%

Table 1.4. – BMI of the respondents



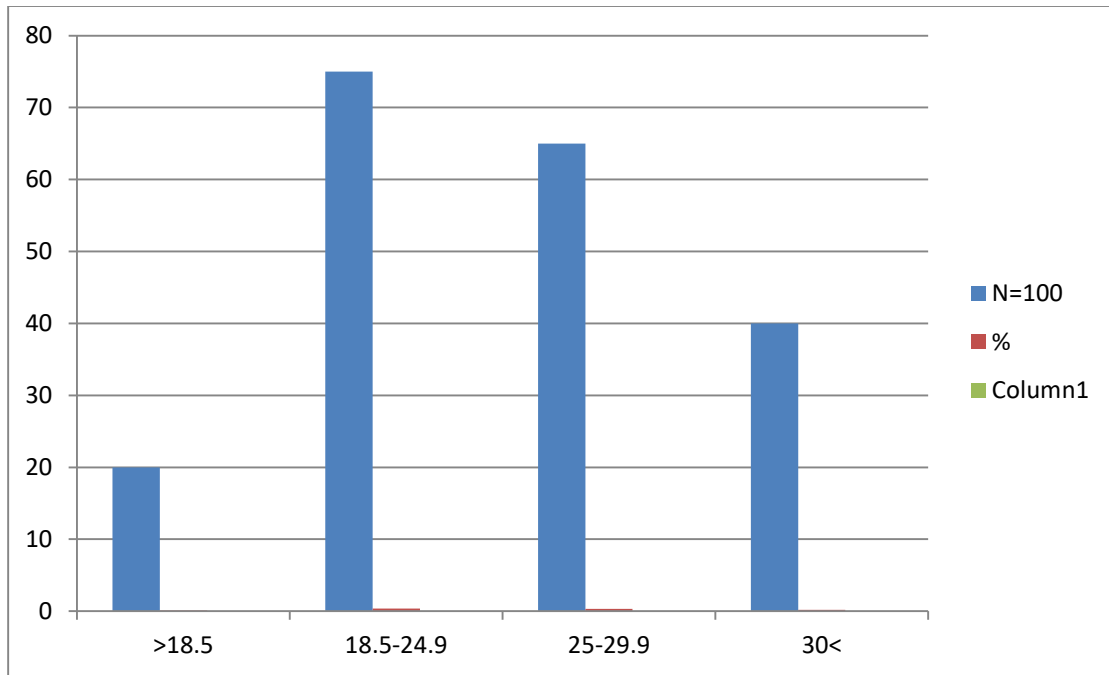


Fig.1.4 BMI of the respondents

PHYSICAL ACTIVITY

PHYSICAL ACTIVITY	N	%
walking	80	40.0%
yoga	50	25.0%
running	40	20.0%
gym workout	30	15.0%

Table 1.5 – Physical activity of the respondents



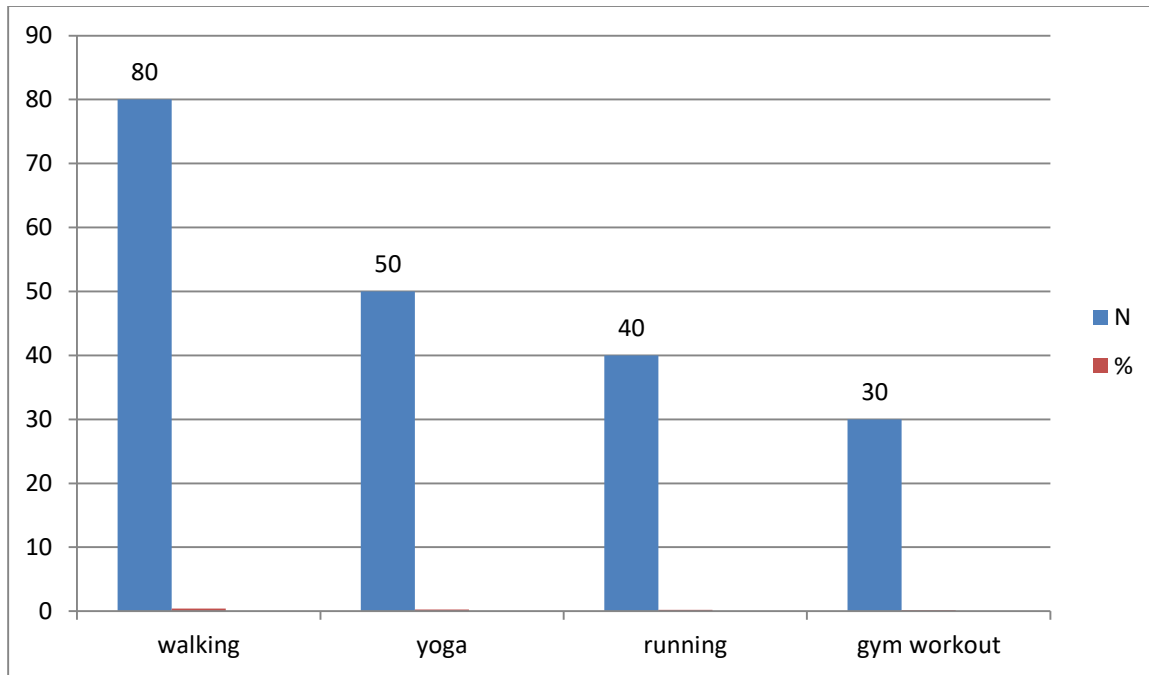


Fig. 1.5 Physical activity of the respondents

EDUCATION

EDUCATION	N=100	%
Matric	26	13.0%
Intermediate	60	30.0%
Graduation	90	45.0%
Postgraduation	18	9.0%
PhD	6	3.0%

1.6- Education of the respondents

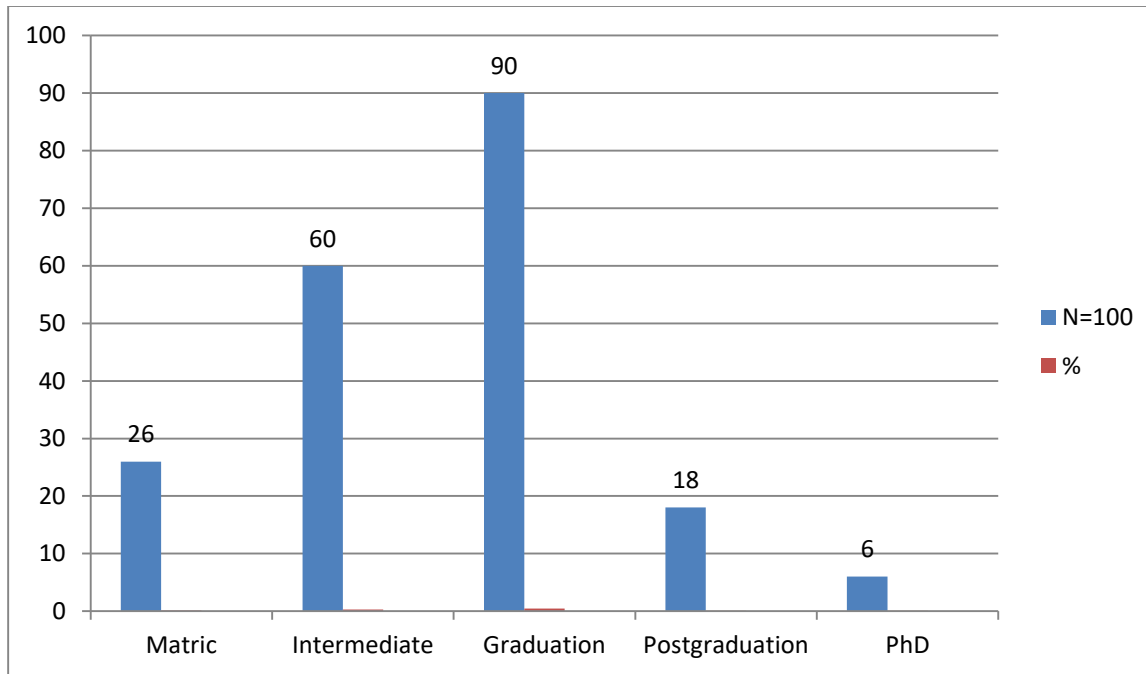


Fig.1.6 – Education of the respondents

KNOWLEDGE RESPONSES OF THE RESPONDENTS

The knowledge responses were taken from 200 working women to a series of nutrition-related knowledge questions. Each question assessed awareness of basic concepts in micronutrient nutrition, particularly regarding iron, calcium, vitamin A, and vitamin C. Responses were categorized as "Yes," "No," or "Do Not Know." A majority of respondents (144) correctly identified **weakness as a main symptom of anaemia**, while 44 said "No" and 12 indicated they did not know. Notably, there was almost universal awareness (197 out of 200) that **iron is important for the formation of hemoglobin and healthy blood**, suggesting a high level of understanding regarding the role of iron in preventing anemia. When it is asked whether **green leafy vegetables and seasonal fruits are rich in vitamins A and C**, 171 responded said correctly, while 12 disagreed and 17 were unsure regarding this. A significant portion (51 participants) did not know that **vitamin C protects the body from scurvy**, despite 149 answering correctly about usage of vitamin c. This indicates a moderate gap in knowledge about the specific protective functions of different vitamins. Knowledge about food and dietary sources of vitamins was generally strong, as 162 participants correctly recognized that **citrus fruits are a major source of vitamin C**, although 38 respondents were either incorrect (19) or unsure (19). Similarly, 170 respondents understood that **vitamin A is essential for healthy eyes**, but 14 said "No" and 16 were unsure. Regarding sources of vitamin A, 179 participants correctly identified **yellow and orange fruits and vegetables** as primary sources of vitamin A. Calcium-related knowledge was slightly less consistent among the respondents. While 158 respondents knew that **a lack of calcium can lead to weak bones and teeth**, 19 answered "No" and 23 did not know about this information. A similar pattern was observed in responses of the individuals for the role of **calcium in the development of bones and teeth**, with 159 gave correct answers, 20 were incorrect, and 21 respondents were uncertain. Encouragingly, 189 respondents were aware that **milk and green leafy vegetables are rich sources of calcium**, showing the highest level of consensus among all the questions. Overall, the data suggested, a

relatively high level of nutritional knowledge among the surveyed working women, especially for general functions and food sources of key nutrients been discussed in the survey. However, gaps remain in the understanding of specific nutrient-related conditions, such as scurvy, and among a small but considerable portion of respondents who are either misinformed or unsure about the information about nutrients their source and role for good health. These findings highlight the need of targeted nutrition education campaigns, particularly through mass media channels which is easily accessible for working women.

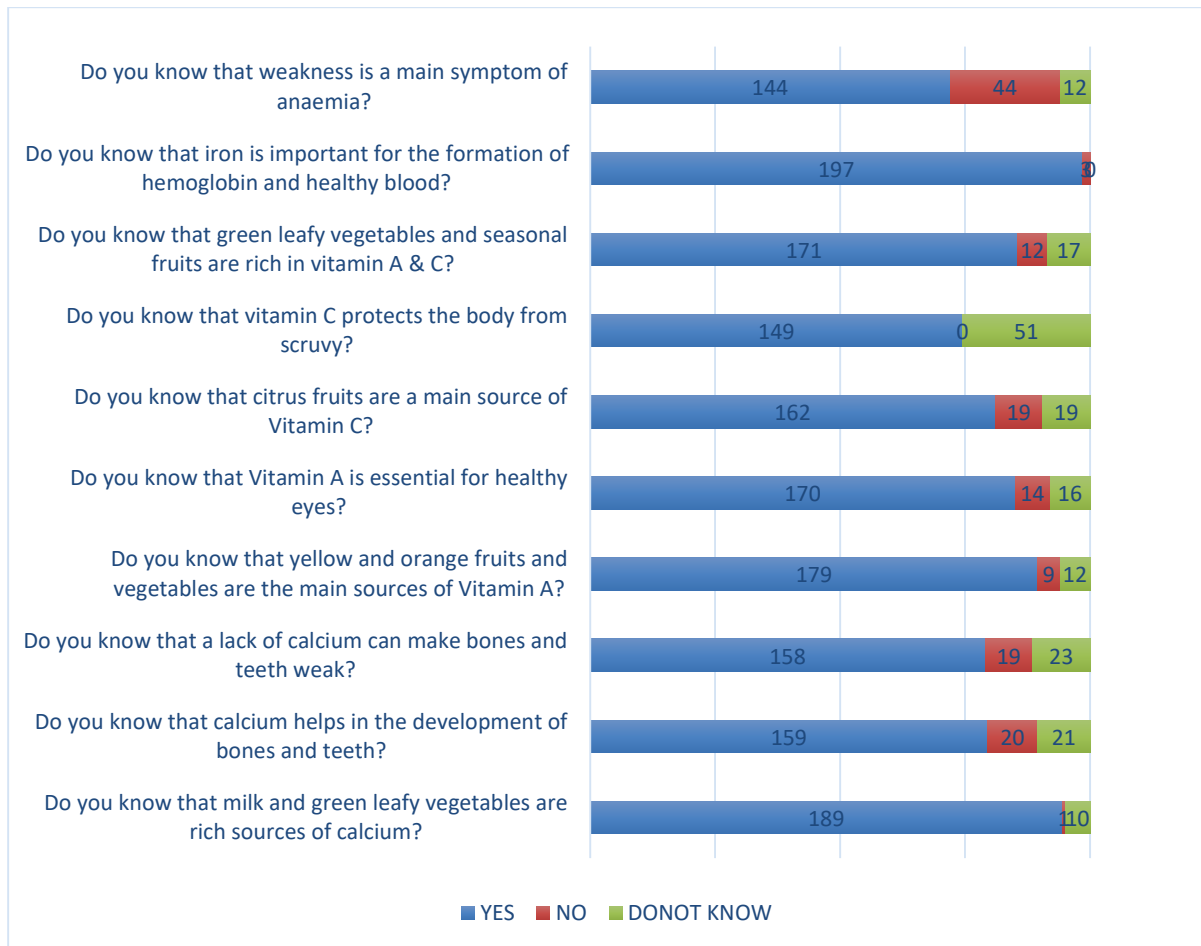


Fig. 1.7 Knowledge responses of the respondents

ATTITUDE RESPONSE OF THE RESPONDENTS

The attitudinal responses of 200 working women towards various dietary and hygiene-related statements were taken. A majority (153) agreed that eating junk food in limited quantities can help maintain good health, though 13 disagreed and 34 remained neutral for the same question, indicating some uncertainty regarding moderate consumption of unhealthy foods. A relatively strong positive attitude was seen toward seasonal fruits and vegetables intake, with 149 agreeing that prioritizing the intake of these fruits and vegetables benefits health, although 27 disagreed, and 24 were neutral on the same opinion. Awareness about the value of micronutrients in fruits and vegetables was particularly high, with 167 agreeing, only 8 disagreeing, and 25 remaining neutral. Most participants (170) also agreed that eating junk food in small amounts reduces health risks, though 17 disagreed regarding the same. When discussed about milk and milk products as sources of important nutrients, 152 agreed, while 16 disagreed and 32 remained undecided. Similarly, daily consumption of fruits and vegetables was supported by 150 respondents, with 17 disagreeing and 33 neutrals, whereas 149 agreed that fruits and vegetables promote good health, but 14 disagreed and 37 were neutral—which is the highest number of neutral responses in this set. In terms of hygiene-related attitudes, the majority showed strong agreement. A total of 174 respondents believed that covering cooked foods and cut fruits before eating helps maintain hygiene, with only 15 in disagreement for it. Similarly, 173 participants agreed that body hygiene helps prevent diseases, while 13 disagreed and 14

were neutral. Finally, an overwhelming 177 respondents agreed that healthy nutrient intake contributes to a healthy body, indicating strong positive attitudes toward nutrition and its link to overall well-being.

Overall, the responses reflect a large positive attitude toward the role of fruits, vegetables, dairy products, hygiene, and balanced eating pattern in promoting good health. However, there is still a minority of respondents expressing disagreement or being neutral, particularly concerning the benefits of junk food in moderation and the health impacts of fruits and vegetables— are the areas where further awareness could be beneficial.

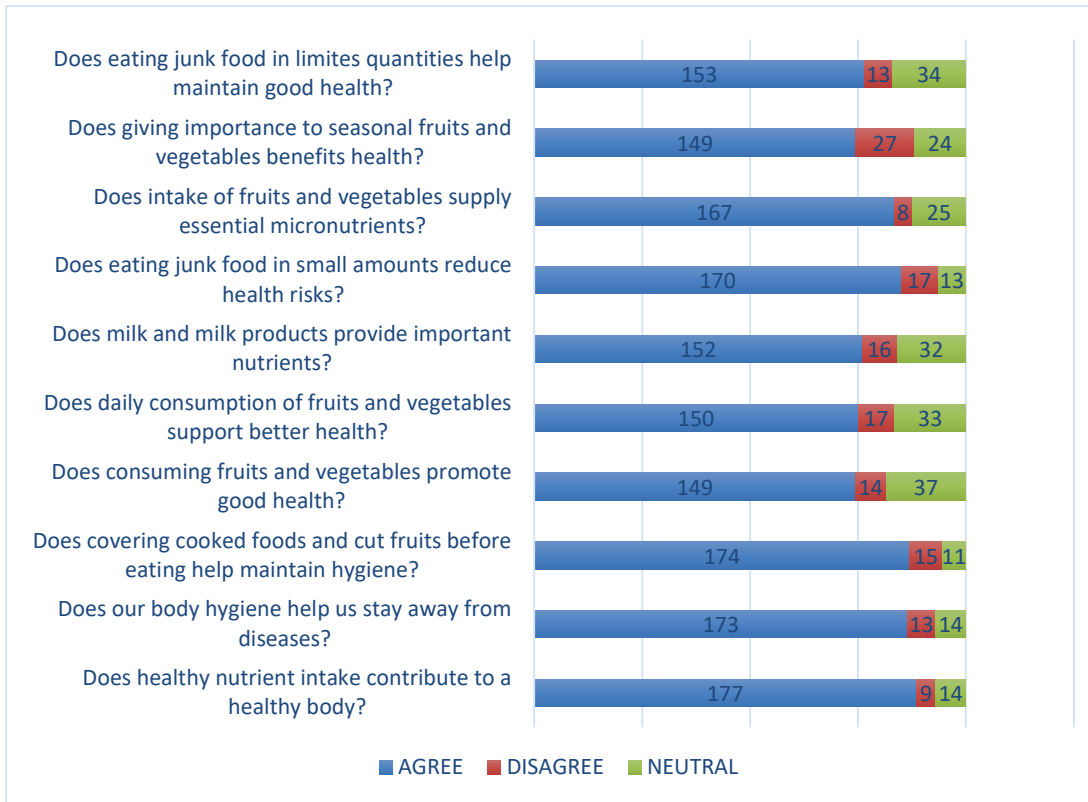


Fig.1.8 Attitude response of the respondents

PRACTICE RESPONSES OF THE RESPONDENTS

The consumption patterns of sweets and fruits among respondents demonstrated diverse dietary preferences. For chocolates, the majority (70%) reported occasional consumption, whereas 20% consumed them regularly and 10% abstained completely from its consumption. In the case of mithai or sweets (traditional Indian sweets), 26% reported frequent consumption, 15% occasional intake, and 59% reported never consumption. Kheer was consumed occasionally by a large proportion (80%) of individuals, while 9% reported regular intake and 11% did not consume it at all. Overall, 73% indicated that they never consumed items from the sweets category, while 14% did consume regularly and 13% occasionally.

Patterns of fruit consumption presented a different trend. Only 19% respondents reported eating fruits consistently each week, 21% consumed them occasionally, while a considerable 60% reported never doing so. Green leafy vegetables, however, showed greater inclusion in diets of the respondents, with 39% consuming them regularly, 40% occasionally, and 21% never.

Preferences between whole and processed fruits were also evident. A majority (63%) favored whole fruits intake, 17% did so occasionally, and 20% not at all. Conversely, fruit juice as a substitute for whole fruits was rarely consumed by the respondents among which —77% reported never consuming it, 23% did so occasionally, and none reported daily intake. Similarly, fruit salad was preferred by 61% of respondents,

24% consumed it sometimes, and 15% avoided it altogether. It is found that, 41% reported consistently avoiding fruits, 48% avoided them occasionally, and only 11% indicated they never avoided fruit consumption.

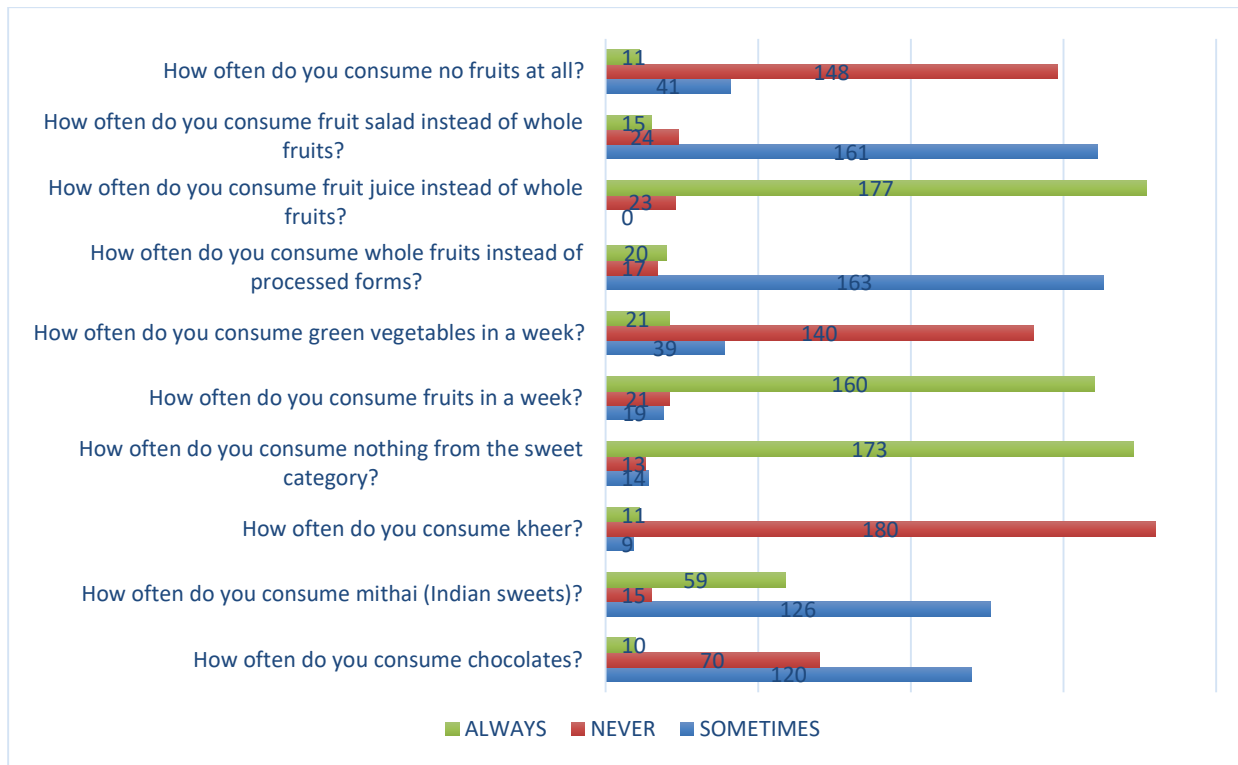


Fig.1.9 Practice responses of the respondents

The dietary practices of 200 working women, focused on fruits, vegetables, and sweet consumption habits. Most participants reported regular consumption of fruits and vegetables, with 160 respondents stating that they always consume fruits in a week and 140 indicating that they never skip green vegetables. Additionally, 173 participants claimed that they never exclude the sweet category from their diet, suggesting a continued preference for sweets despite health awareness. When it comes to fruit consumption habits, 41 women reported that they are never consuming fruits at all, while a significant 148 participants admitted to this practice, indicating a major gap in fruit intake. However, 163 participants stated they sometimes consume whole fruits instead of processed forms, which suggests a shift towards healthier practices. Interestingly, while only 15 participants always eat fruit salad instead of whole fruits, a substantial 161 respondents sometimes consume fruit juice instead of whole fruits, possibly due to convenience of availability. Regarding the intake of traditional sweets, such as kheer and mithai, 180 respondents never consume kheer, while 126 stated they sometimes consume mithai. Only a small number (11 for kheer and 15 for mithai) reported always consuming these sweets, which may reflect a conscious attempt to limit intake of calorie-dense foods. In contrast, chocolates remain a frequent indulgence, with 120 participants consuming them sometimes and 70 stating never its intake, indicating their popularity despite health concerns.

Overall, the data suggest that while many working women have adopted positive dietary practices—such as weekly consumption of fruits and vegetables and choosing whole over processed fruits—there are still considerable gaps, especially in the consistent inclusion of fruits and in limiting sweet consumption. These findings indicate an opportunity for further nutritional education and behavior-change strategies, particularly aimed at increasing daily fruit intake and reducing dependence on sugary snacks and beverages.

CONCLUSION

The study of 200 working women underscores the significant influence of mass media on their nutritional knowledge, attitudes, and practices. Educational attainment emerged as the most important factor, with higher-educated respondents showing significantly better awareness of key nutrients such as iron, calcium, vitamin A, and vitamin C. For example, education was strongly associated with recognizing the role of personal hygiene in disease prevention ($\chi^2 = 15.729$, $p = 0.046$) and understanding the health benefits of fruits, vegetables, and dairy products ($p \leq 0.000$). In contrast, age had a limited effect, significantly influencing knowledge only about calcium's role in bone and teeth development ($\chi^2 = 17.458$, $p = 0.026$) and identification of vitamin A sources ($\chi^2 = 15.617$, $p = 0.048$), while other nutrition-related knowledge showed no age-related differences ($p > 0.4$).

As attitudes were generally positive—such as 153 respondents agreed that limited junk food consumption can support good health and 174 recognizing the importance of covering cooked foods for hygiene—practices revealed a disconnect in opinion. Despite 160 women reporting weekly fruit consumption, 41 admitted never eating fruits, and many continued regular intake of sweets, with 70% occasionally consuming chocolates. This inconsistency highlights the gap between knowledge and behavior, suggesting that mass media messages may sometimes confuse or fail to motivate healthier practices among the society.

Mass media remains a central source of nutritional information for working women, but its dual role as both an educator and a promoter of unverified trends poses challenges Worldwide. Given the popularity of diet fads and influencers, improving the quality and clarity of mass media messages is essential. To bridge the gap between awareness and behavior, targeted public health campaigns should focus on evidence-based nutrition education and mass media literacy, empowering women to assess more appropriate and apply information for sustained and healthier dietary habits.

Therefore, while working women demonstrate commendable levels of nutritional awareness and generally positive health attitudes, there remains a critical gap between knowledge and consistent, healthy dietary practices. To bridge this gap, it is essential to harness the reach of mass media more responsibly—by promoting evidence-based nutrition education, enhancing media literacy, and implementing targeted public health messaging. Empowering women with not just information, but also the tools to evaluate and apply it effectively, will be a key to fostering long-term, positive health outcomes.

PARTICIPANT CONSENT: Verbal informed consent was obtained from the participants.

AUTHOR'S CONTRIBUTION: Sukriti and Rupam originally developed this study. Sukriti collected the data under Rupam's supervision. The final manuscript was read and approved by both authors.

REFERENCES

1. Goodyear, V. A., Wood, G., Skinner, B., & Thompson, J. L. (2021). The effect of social media interventions on physical activity and dietary behaviours in young people and adults: a systematic review. *International Journal of Behavioral Nutrition and Physical Activity*, 18(1), 72. <https://doi.org/10.1186/s12966-021-01138-3> [BioMed Central](#).
2. Salwathura, A., & Ahmed, F. (2023). Dietary Pattern, Nutrition-Related Knowledge and Attitudes of Working Women in Western Province, Sri Lanka. *Nutrients*, 15(13), 3007. <https://doi.org/10.3390/nu15133007> [MDPI](#)
3. MUSAIGER, A. O., & Al-Mannai, M. (2013). Association between exposure to media and body weight concern among female university students in five Arab countries: a preliminary cross-cultural study. *Journal of Biosocial Science*. <https://doi.org/10.1017/S0021932013000332> [Cambridge University Press & Assessment](#)

4. Hefner, V., Woodward, K., Figge, L., Bevan, J. L., Santora, N., & Baloch, S. (2014). The influence of television and film viewing on midlife women's body image, disordered eating, and food choice. *Media Psychology*, 17(2), 185–207. <https://doi.org/10.1080/15213269.2013.838903> [Taylor & Francis Online](#)
5. Janaki, B. (1992). *Impact of nutrition communication through mass media on nutrition knowledge of women* (Unpublished master's thesis). Professor Jayashankar Telangana State Agricultural University, Hyderabad. [Krishikosh](#)
6. Mukai, T., Masuda, M., & Yamamiya, Y. (2018). Dieting behaviors and the media influence in females. *The Japanese Journal of Adolescent Psychology*, 30(1), 41–51. https://doi.org/10.20688/jsyap.30.1_41 [J-STAGE](#)
7. Upadhyaya, S., & Melkote, S. R. (2024). Social justice implications for development communication: a case study of body dissatisfaction disorder. *Journal of Development Communication*. (Accepted/In press) [SAGE Journals](#)
8. Full article: The use of social media as a source of nutrition information. (2023). [Article Title]. [Journal/Publisher]. <https://doi.org/10.xxxx/xxxxxxx> [Taylor & Francis Online](#)
(You will need to fill in the full journal name, volume, and pages from your source.)
9. Impact of the Mass Media on Adherence to the Mediterranean Diet, Psychological Well-Being and Physical Activity: Structural Equation Analysis. (n.d.). *Publications in the Health Sciences*. <https://pubmed.ncbi.nlm.nih.gov/33916699/PubMed>
10. Johry, A., & Srivastava, S. (2014). Media influence on dietary practices of college going girls. *Asian Journal of Home Science*, 9(2), 628–632. [iScholar](#)
11. National Institute of Nutrition. (2020). *Dietary guidelines for Indians – A manual*. Hyderabad: NIN Press.
12. Sharma, M., & Choudhary, A. (2018). The use of digital platforms for nutrition education among working adults. *Journal of Medical Internet Research*, 20(5), e10252. <https://doi.org/10.2196/10252>
13. Patel, V., & Mehta, K. (2019). Popular diet trends and their impact on health: A critical review. *Nutrition Reviews*, 77(4), 289–301. <https://doi.org/10.1093/nutrit/nuz003>
14. Singh, N., & Das, S. (2022). Media influence on dietary behavior and public health outcomes: A review. *Public Health Nutrition*, 25(6), 1231–1242. <https://doi.org/10.1017/S1368980021004337>
15. World Health Organization. (2021). *Media literacy and health promotion*. Retrieved from <https://www.who.int/publications/i/item/media-literacy-and-health-promotion>