

## AWARENESS OF IMPORTANCE OF DIET AND PHYSICAL ACTIVITY ON QUALITY OF LIFE IN POST-MENOPAUSAL WOMEN.

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**Abstract:** **Introduction:** Menopause marks the natural end of a woman's reproductive cycle, typically occurring between 45–55 years old, because of hormonal changes, post-menopausal women are at risk for physical, emotional, and metabolic disorders. Despite the significant role relating to eating patterns and bodily activity in managing menopausal symptoms and enhancing quality of life, awareness remains limited in many populations. **Methodology:** The investigation was conducted using a cross-sectional approach among 138 post-menopausal women aged 40–60 years in Karad. Participants were selected using a random sampling technique. An authenticated questionnaire was distributed digitally through Google Forms to assess awareness regarding diet, physical activity, and lifestyle factors. Women possessing the following characteristics were included amenorrhea for minimum 12 month and natural menopause. **Purpose:** The central focus this investigation focused on assess and increase awareness about the function of proper diet and regular physical activity in improving the overall well-being during post-menopause. Secondary objectives included promoting healthy habits and educating women about managing long-term disease risk through lifestyle interventions modification. **Results:** The results indicated that a majority of women lacked less knowledge about the value o diet and exercise during menopause. Many did not engage in regular physical activity or follow balanced nutrition. Increased awareness was correlated with better lifestyle habits and fewer reported menopausal symptoms. **Conclusion:** The study highlights a significant gap in awareness among post-menopausal women regarding the benefits of diet and physical activity. Educational programs and community-based awareness campaigns essential to improve lifestyle behaviors and promote healthy aging in this population.

**Keywords:** diet and physical activity, quality of life, post-menopausal women

## INTRODUCTION

Menopause is explained as permanent cessation of menstruation resulting from the loss of ovarian follicular activity. It occurs naturally biological process generally occurring between the ages of 45 -55 years. This transition significantly impacts hormonal balance, especially the reduction of estrogen, which is of great importance in various bodily functions including musculoskeletal and cardiovascular health. Globally, there is an increasing need to spread awareness regarding menopause management, especially in rural and semi-urban areas such as Karad, where preliminary data indicates only 11% knowledge about menopause in women its management through diet and physical activity. Phases of Menopause Perimenopause: The transitional stage before menopause, marked by irregular periods and fluctuating hormone levels. Menopause: Officially defined after 12 consecutive months without menstruation. Postmenopause: The phase following menopause, where symptoms may continue due to sustained low estrogen levels. Pathophysiology of Menopause: The central cause of menopause is the decline in estrogen production by the ovaries. This hormonal change results in several physiological effects: Decreased muscle strength and joint flexibility, Increased cartilage stiffness, Higher risk of osteoarticular disorders, such as osteoarthritis

and arthritis Natural menopause involves hormonal fluctuations lasting around 4 to 5 years, symptoms could persist over a period of 8 to 10 years in many women. Common Symptoms Menopausal symptoms vary in severity and duration and may include: Sudden feelings of warmth, night time perspiration, and mood changes, Vaginal dryness, Weight gain, Fatigue and stress Concerning eating habits and physical exercise of life if not managed effectively importance of diet and physical activity Proper nutrition and Daily exercise regimen play a fundamental role in alleviating menopausal symptoms: A healthy and varied diet rich in calcium, vitamin D, and phytoestrogens can help support bone health. Routine workouts contribute to better cardiovascular well-being, fitness, maintains muscle mass, and reduces stress and anxiety. Despite these benefits, only a small percentage (11%) of woman in Karad are aware of these lifestyle strategies for symptom management Exercise: Strength training to preserve muscles and bone density. Yoga and stretching for stress relief and flexibility. Sleep: Improve sleep quality take 7 to 9 hours sleep. Stress management: Relaxation techniques. “The survey on the familiarity with diet and nutrition with lifestyle modification in menopause is relevant to the wellness concerns affecting women during menopause like cancers, cardiovascular diseases, and respiratory disease. Which typically occurs between the ages of 45-55 years. And

lack of awareness exacerbate the symptoms like hot flushes, osteoporosis. These my research topic will create awareness and improve menopausal women quality of life.”

## MATERIAL AND METHODS

**Study Design:** The current research focuses on cross-sectional study designed to appraise the awareness of the importance Concerning eating habits and physical exercise the standard of living in post-menopausal women. **Study Setting:** The study was performed in Karad, Maharashtra, covering local communities, outpatient departments, and residential areas where eligible post-menopausal women were approached. **Study Duration:** The study took place across a period of 6 months (January 2024 to June 2024). **Study Population:** The study population included post-menopausal women aged 40 to 60 years who had transitioned into menopause naturally (i.e., no menstruation for at least 12 consecutive months). **Sample Size:** The sample size was determined using the formula:  $n = 4pq / l^2$  where:  $p$  = estimated prevalence of awareness (taken from literature as 11%)  $q = 100 - p = 89$   $l$  = allowable error (5%) Based on this, the final number of participants total 138. **Participants Sampling Technique:** A random sampling strategy of the simple type was used employed recruit participants who fulfilled the in criteria. **Inclusion Criteria:** Women aged between 40 and 60 years Women who reached menopause through natural processes (amenorrhea for minimum 12 months) the women who had agreed to give informed consent and actively participate within the research **Exclusion Criteria:** Women on hormonal therapy or other medications influencing hormonal balance. Women with severe mental illness. Individuals with substance abuse or smoking habits women experiencing menopause as a result of surgery.

**Materials Used:** Pre-validated questionnaire (in English and Marathi) distributed through Google Forms or printed hard copies Consent form (in English and Marathi) Participant information sheet: Internet-enabled device (mobile/laptop/tablet) for online response. Microsoft excel and SPSS software for Procedure: Authorization for the study recived ethical approval from the Institutional Ethics Committee. The conducted study was introduced to eligible participants. They were informed about the objectives, risks, and benefits. Written approval was gathered from each participant. Participants were selected based on in and out criteria. A structured questionnaire covering eating habbts, regular exercise practices, and menopausal symptoms was administered. Data was collected and recorded securely without revealing any personal identity.

### Inclusion criteria:

Female who had a amenorrhea since 1 year .  
Age group 40 to 60 yrs

### Exclusion criteria:

Women are on hormonal therapy and other medication  
Severe mental condition  
Smoking

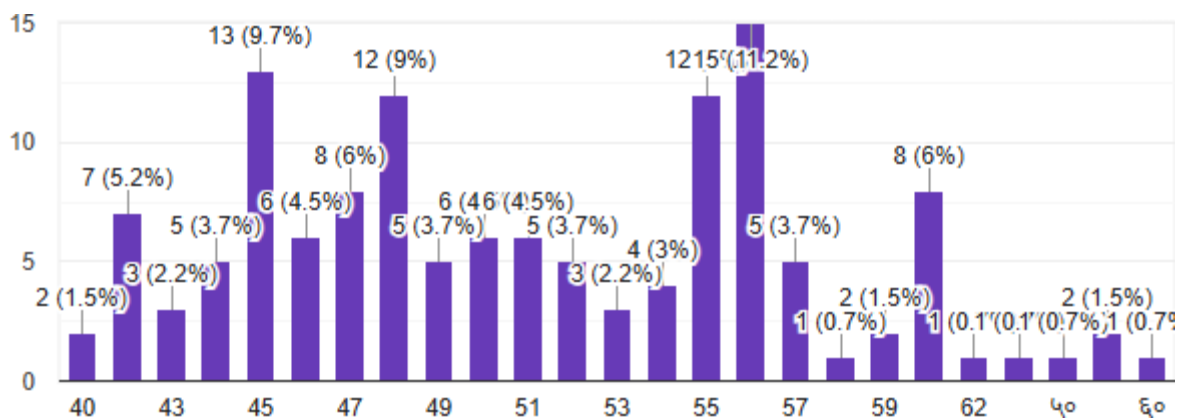
### ETHICAL COMMITTEE APPROVAL

The approval for this study is gained from the institutional ethics committee of Krishna Vishwa Vidyapeeth (deemed to be university), Karad. Respondents were provided with a detailed explanation about Questionnaire as well the study which is the research was planned each participant voluntarily agreed after being informed and every participant participating in this investigation. There was a volunteer involvement of all the respondents in this research whose confidentiality was thoroughly maintained

## RESULTS AND OBSERVATIONS:

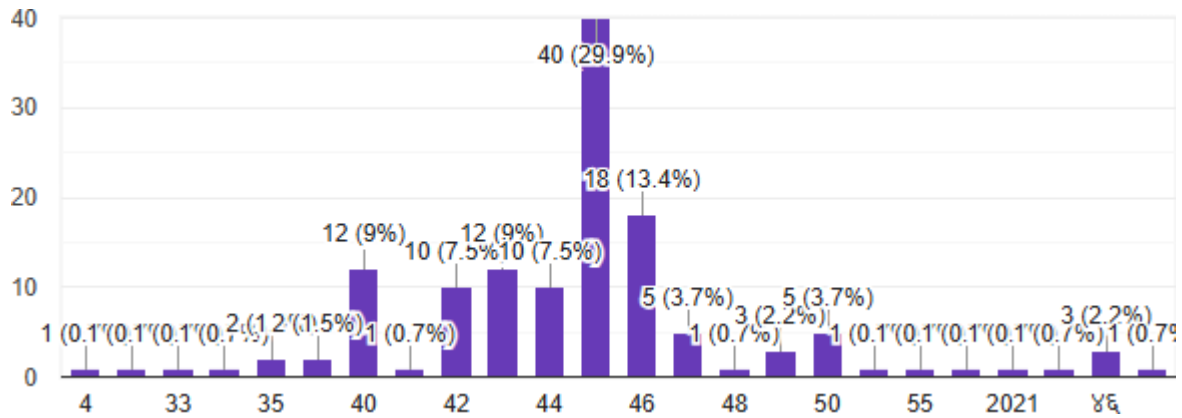
### STATISTICALLY ANALYSIS

AGE:

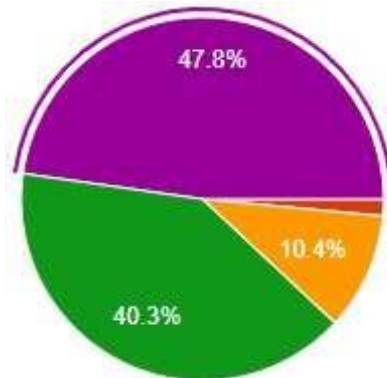


Interpretation:

MENOPAUSE YEAR:

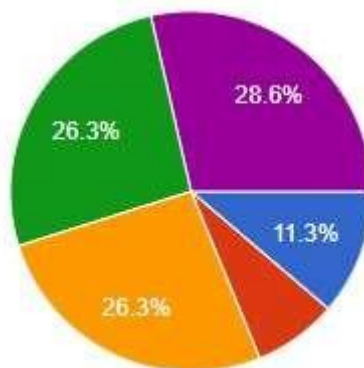


Q1) How often do you eat meals in a day (including tea, coffee, fruits, salads, snacks)?



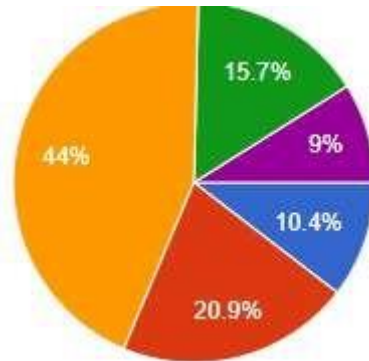
>6 times	6 times	5 times	4 times	3 times.
0	2	14	54	64

.Q2) How often do you drink sweetened beverages like soft drinks, juices, etc.?



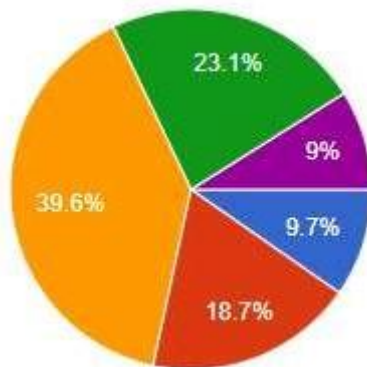
At least once daily	3 to 6 times a week	1 to 2 times a week	2 to 3 times a month	Once a month or less
15	10	35	35	38

Q3) How often do you eat sweets such as Laddu, Barfi, Jalebi, Kulfi, Chocolate, Halwa, Rice pudding, etc.?



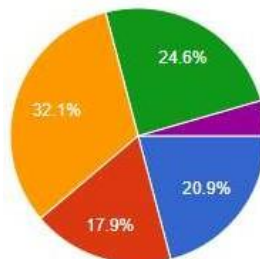
At least once daily	3 to 6 times a week	1 to 2 times a week	2 to 3 times a month	Once a month or less
14	28	59	21	12

Q4) How often do you eat fried foods such as Puri, Parathas, Kachori, Tikki, Bhature, Pakoras, Samosas etc.?



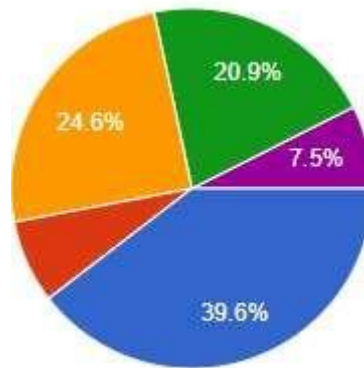
At least once daily	3 to 6 times a week	1 to 2 times a week	2 to 3 times a month	Once a month or less
13	25	53	31	12

Q5) How often do you eat high salt snacks such as Namkeen, Bhujia, Pickles, Chutney, Papad etc.?



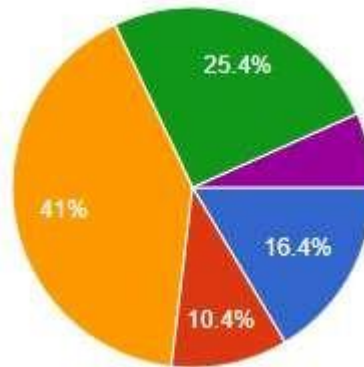
At least once daily	3 to 6 times a week	1 to 2 times a week	2 to 3 times a month	Once a month or less
28	24	43	33	8

Q6) How often do you consume sugar and honey in tea, coffee, curd, lassi, etc?



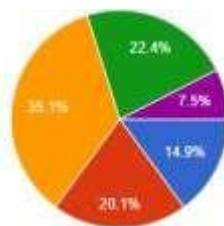
At least once daily	3 to 6 times a week	1 to 2 times a week	2 to 3 times a month	Once a month or less
53	10	33	28	10

Q7) How often do you eat fruit and salad?



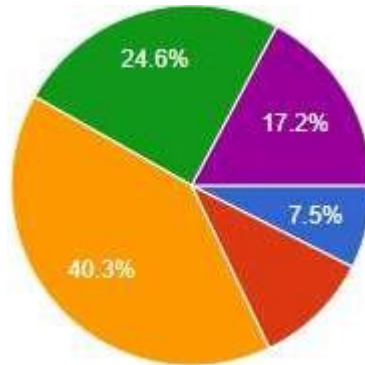
At least once daily	3 to 6 times a week	1 to 2 times a week	2 to 3 times a month	Once a month or less
22	14	55	34	9

Q8) How often do you eat sprouted pulses and green vegetables?



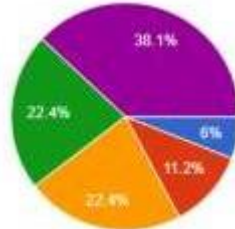
At least once daily	3 to 6 times a week	1 to 2 times a week	2 to 3 times a month	Once a month or less
20	27	47	30	10

Q9) How often do you eat saturated fat like mutton fat, egg yolks, etc.?



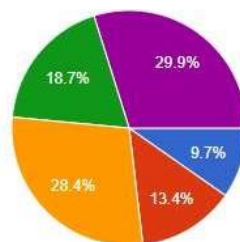
At least once daily	3 to 6 times a week	1 to 2 times a week	2 to 3 times a month	Once a month or less
10	14	54	33	23

Q10) How often do you eat refined food items like burgers, pizza, etc.?



At least once daily	3 to 6 times a week	1 to 2 times a week	2 to 3 times a month	Once a month or less
8	15	30	30	51

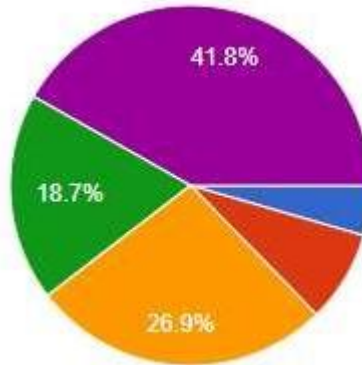
Q11) How often do you eat ghee, butter, cream, mayonnaise, etc.?





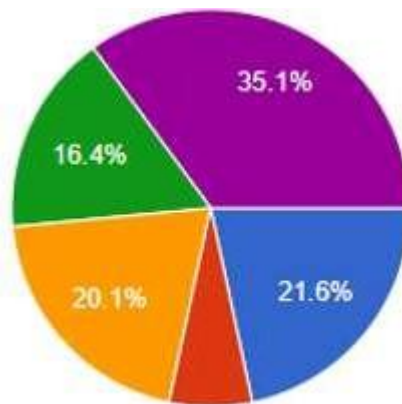
At least once daily	3 to 6 times a week	1 to 2 times a week	2 to 3 times a month	Once a month or less
13	18	38	25	40

Q12) How often do you eat out of the house (such as wedding, party, family function etc.)?



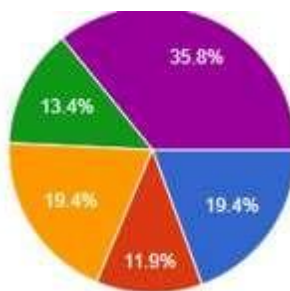
At least once daily	3 to 6 times a week	1 to 2 times a week	2 to 3 times a month	Once a month or less
10	15	25	40	37

Q13) How many days do you exercise in a week?



Daily	5 to 6 times a week	3 to 4 times a week	1 to 2 times a week	Never.
29	9	27	22	47

Q14) How much time do you exercise for each session?



>40 minutes	30–40 minutes	20–30 minutes	20–10 minutes	<10 minutes.
26	19	26	18	48

## DISCUSSION

The present the examination was conducted to assess the level of awareness understanding the significance of Healthy eating and active lifestyle the quality of life in post-menopausal women. The findings revealed that a significant proportion of the participants lacked adequate awareness about how lifestyle choices impact menopausal symptoms and long-term health outcomes. Most women in the study reported irregular dietary habits and insufficient physical activity. This low level of awareness had a direct connection with the presence of common menopausal complaints such as joint pain, fatigue, mood swings, and weight gain. Who were familiar with balanced diets and engaged in routine physical activity experienced fewer symptoms and reported a better sense of well-being. These outcomes support prior investigation that suggest that lifestyle interventions — particularly involving nutrition education and exercise — are effective in managing menopausal symptoms and minimizing the chance of like osteoporosis, cardiovascular disease, and obesity. Furthermore, The study indicated that women from urban regions had slightly better awareness levels than rural counterparts, possibly due to access to health information and media. The study highlights a critical gap in community health education, especially among middle-aged women. Improving awareness can hold an important position in prevention and self-care, which are essential during the post-menopausal phase.

## CONCLUSION

Outcomes from this survey indicate a shortage of adequate awareness among post-menopausal women regarding the relevance of a proper eating habit and exercise in improving their quality of life. The outcomes show that most women participants are unaware the usefulness of lifestyle modification in managing menopause-related health issues. There is a clear need for community-based educational programs that focus on diet, nutrition, physical activity, and lifestyle modification. Enhancing awareness in this population can lead to the adoption of healthier behaviour, resulting in reduced symptoms, improved physical function, and enhanced life quality during and after menopause.

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