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EFFECTIVENESS OF NUTRITION EDUCATION PROGRAMME ON KNOWLEDGE, ATTITUDE AND PRACTICES OF COLLEGE GOING GIRLS

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ABSTRACT

Educational institutions have been one of the most well-liked locations because they are recognised as one of the key environments for the development of eating habits and preferences. These environments ought to offer comprehensive educational programmes, such as initiatives in food and nutrition targeted at improving students' general health and nutritional status. The current study, which attempted to ascertain how nutrition education sessions affected their comprehension, attitudes, and practices. There 120 urban college-bound ladies were involved from a university in Cuttack, Odisha. The nutrition intervention approach included lectures, food demonstrations, role plays, skits, group discussions, and training sessions over the course of twelve weeks. A well-designed Pre-tested questionnaire was given to the girls to evaluate the effectiveness of the nutrition both before and after the intervention. For assessing knowledge, Attitude and Practices a separate question format had been distributed among the subjects. The ratings obtained at both the stages were totaled and percentage was examined to determine the difference in feedbacks. The results obtained after all the programs disseminated during these twelve weeks of Nutrition education showed that students became more aware and conscious about their physique, overall health, cooking practices, refining their concept based on food and nutrition. So interesting and creative approaches are very much important to make them more attentive and adoptive to change their faulty food habits and wrong mind set, concept, to pursue favorable attitudes, and practices.

Index Terms: Pre-tested Questionnaire, Nutrition Education, nutrition intervention, Favorable attitude.

I. INTRODUCTION

Food and nutrition are fundamental needs for health that are necessary for full human development, quality of life, and citizenship. Nutritional risks affect every stage of the human life cycle, taking on different epidemiological configurations and roles in the health and disease of each community. However, due to the limited and unequal access to resources, healthcare, education, training, and employment, living in developing countries comes with more difficulties. In India, young people who are seeking higher education make about 15% of the population. However, Joglekar and Bhoi (2016) found that the health of this group is alarmingly poor due to the deficiency disorders they experience. Therefore, this sector's progress is essential for a country's proper development. Growth during adolescence and in women of reproductive age (20-49 years) may be restricted by nutrient deficits. Chronic energy deficit can also diminish productivity, decrease activity, and raise the risk of infection, leading to an increased risk of preterm birth and low birth weight in newborns (NFHS, 2015-2016). Different lifestyle disorders are also brought on by overnutrition problems. Therefore, ensuring young women have access to adequate nutrition is a socially and economically significant goal, having an impact on the intergenerational cycle.

College years are the memorable ones, full of fresh physical, mental, emotional, and social difficulties that test students' endurance, activity, and attention. However, a number of factors, including peer pressure, religion, peer group influences, and social and cultural pressure, negatively impact college students' nutritional status by causing them to deviate from their usual healthy dietary patterns and lifestyles, which in turn causes a number of chronic disorder conditions. When combined with a lack of physical exercise, the consumption of processed and refined foods that are heavy in sugar, fat, and salt not only causes various deficiency disorders but also significantly contributes to the rise in chronic illnesses. Female college students commonly diet, stress, and experience depression at this time, which causes them to binge eat because they are sensitive about their bodies. College students frequently engage in behaviours like skipping breakfast, failing to eat meals at the appropriate times, sleeping too little, using junk food as a substitute, etc. (Joglekar, 2016). As they attempt to adjust to an independent existence, they are also seeking self-reliance, which includes choosing a diet that works for them (Das & Evans, 2014). As a result, students are more prone to exhibit bad eating habits during this time (Tok et al., 2018).

Assessment and improvement of knowledge, attitude, and practises (KAP) connected to food and nutrition are among the most crucial factors in guaranteeing household food and nutritional security (Weerasekara et al., 2020). Knowledge is typically evaluated to determine how well local knowledge relates to broad concepts. "A learned predisposition to think, feel, and act in a particular way towards a given object or class of objects" is the definition of attitude. The intricate interaction of beliefs, feelings, and values leads to attitude. According to Haq et al. (2012), questions in KAP surveys typically focus on how knowledge and attitude are used in daily life. Young adults (18 to 25 years old) are usually disregarded in favor of children and adults when it comes to education. Future India would have to contend with a variety of diseases made worse by nutritional deficiencies (Gopalan, 2013). In addition to protecting people from nutritional deficiencies and communicable and non-communicable diseases, raising understanding about food and nutrition can also help people achieve excellent health.

Nutrition education programmes are crucial because they aim to improve people's dietary intakes by encouraging behavioral changes including food choice and cooking skills, goal-setting, motivation, and support for change efforts. (Dunneram Y. and Jeewaon R., 2015).

II. METHODOLOGY

A total of 120 ladies from a university in the urban region (of Bhubaneswar and Cuttack city) were chosen at random, and each one gave written consent to take part in the study. Data on the demographic profile of the individuals, which included elements like age, religion, caste, marital status, type of family, average family income (monthly), and area of residence, was gathered using a validated, pretested structured questionnaire. A questionnaire with 15 multiple-choice questions in knowledge, practice segment and 16 questions in attitude section were asked. Queries about food intake, sources, benefits, deficiency disorders, cooking practices, updating of food related information, activeness in participation in different food, nutrition and health events, motivating others etc. were there in format to evaluate the respondents' nutrition-related knowledge, attitude and practices.

Knowledge-based questions cover topics including a balanced diet, foods that are high in energy, foods that build muscle and immunity, the significance of nutrition, how to prepare while preserving nutrients, super foods, antioxidants, foods to avoid anemia etc. A balanced daily diet, favourite dishes, attending informational events and cooking techniques were among the topics covered in the attitude questions. Another was how to encourage friends and family to adopt the same attitude. Questions about nutrition-related practices covered how often people wash their rice and dal, use leftovers, cook their veggies, employ various cooking techniques, and frequently prepare wholesome, enticing dishes.

Several useful and appealing teaching tools, such as booklets, posters, and demonstrations of simple, healthy recipes, were used to transmit knowledge on good health, lifestyle, food, and nutrition. Additionally, a concerted attempt was made to create nutrient-dense dishes for young college students, bearing in mind the students' health and acceptability factors. Easy recipes with a high protein, iron, and calcium content were created and presented to the kids

In order to evaluate the effectiveness of the nutrition intervention programme, before and post KAP scores were compared, along with the mean scores relating to nutritional knowledge, attitude, and practices that were thus collected.

III. RESULTS AND DISCUSSION

Socio-demographic profile of the subjects

In the present study 120 college going girls aged between 18 and 22 years were selected. The results revealed mean age of the subjects to be 18.95 ± 1.40 years. Most of them (89%) were Hindus, while other religions constituted 11 per cent of the sample. Nearly 92 per cent of the subjects belonged to the nuclear families, and 8 per cent of the subjects hailed from urban background. Moreover, according to the study sample, 78 per cent of them had monthly family income above Rs. 50,000/-.

Pre and Postmean scores for nutrition related knowledge among subjects

In order to assess the impact of Nutrition Education on respondents regarding some Nutritional facts 120 respondents were taken. The respondents were administered a total of **15 questions** and their responses were registered in terms of their attempts at answering the questions as **Right or Wrong. (15 parameters)**. Respondents' attitude regarding various questions varied. It was observed that most of the respondents **105(87.5%) - 115(95.8%)** gave wrong answers to various questions asked to them before Nutrition Education. After the Nutrition Education Provided to the respondents regarding various nutritional facts, there was a discernible improvement in their knowledge, awareness, and attempts to provide accurate responses to the questions. The Right attempt percentage of respondents got improved dramatically, **i.e.; 102(85%) to 117(97.5%)**.(Fig1 and 2).

N=120

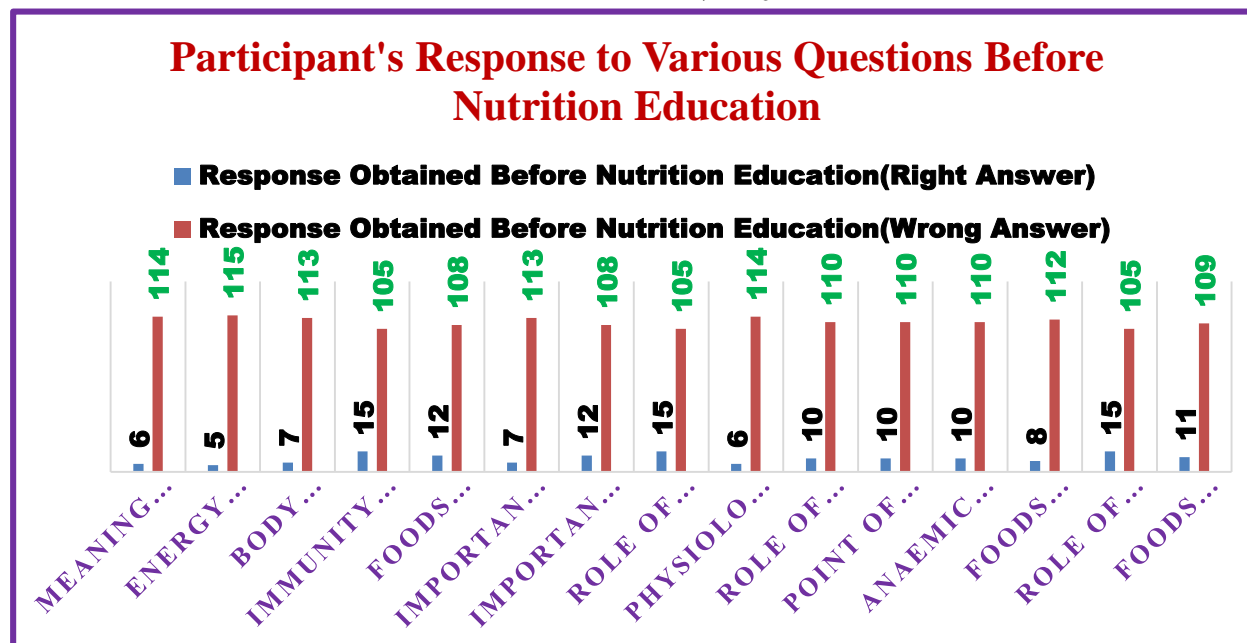


Figure-1: Participant's Response to Various Questions Before Nutrition Education

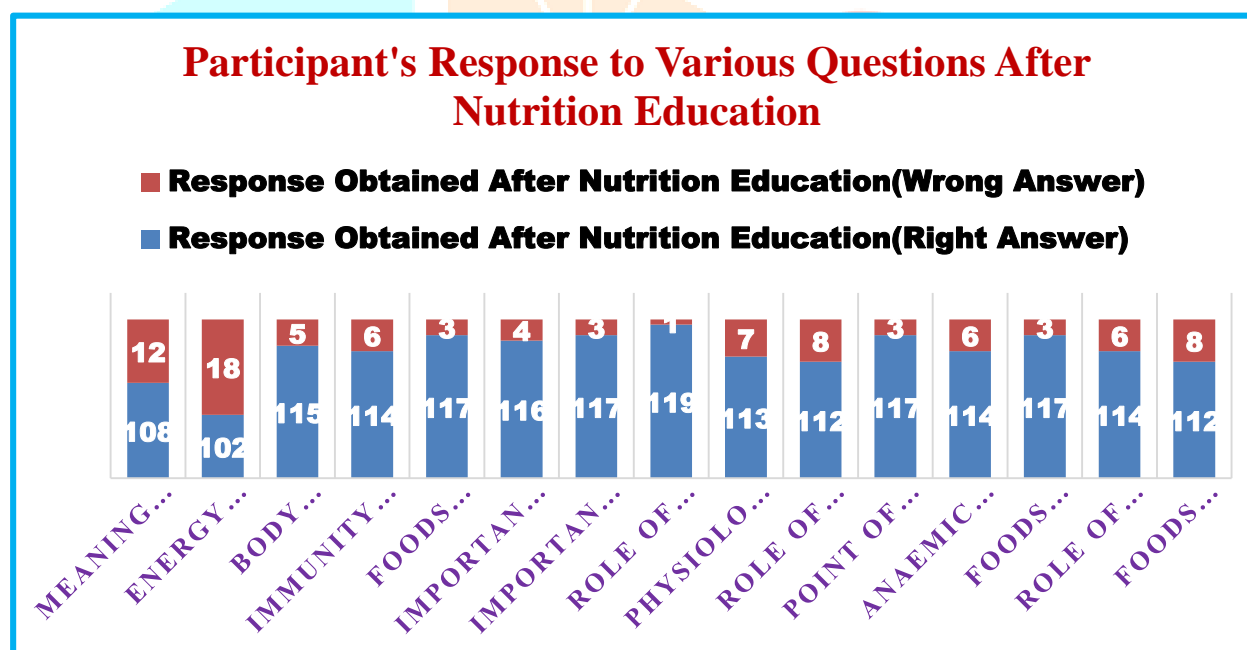


Figure-2: Participant's Response to Various Questions Before Nutrition Education

Pre and Postmean scores of nutrition related attitude among subjects

A total of 120 respondents (College Girls) were taken to evaluate the effect of nutrition education on respondents' attitudes towards some nutritional facts. To categorize respondents' responses to questions, a total of 5 parameters (Strongly Agree, Agree, Not Decided, Disagree, and Strongly Disagree) were fixed. Different queries received varying responses from respondents. Before receiving nutrition education, the majority of respondents—52 (43.3%) to 109 (90.8%)—came out with a disagree attitude, while just a small minority—2 (1.6%) to 8 (6.6%)—had come out with an agree attitude. Following the delivery of the nutrition education, there was a rise in the curve representing respondents' attitudes in terms of Agree and Strongly agree for the items posed. Out of 120 respondents, 45(37.5%) to 77(64.1%) showed **Agree attitude** while 15(12.5%) to 45(37.5%) showed **Strongly agree attitude** and the **Disagree attitudes** were reduced to a larger extent. Strongly Disagree and Not Decided attitude showed by respondents were very few or negligible. (Fig 3 and 4).

N=120

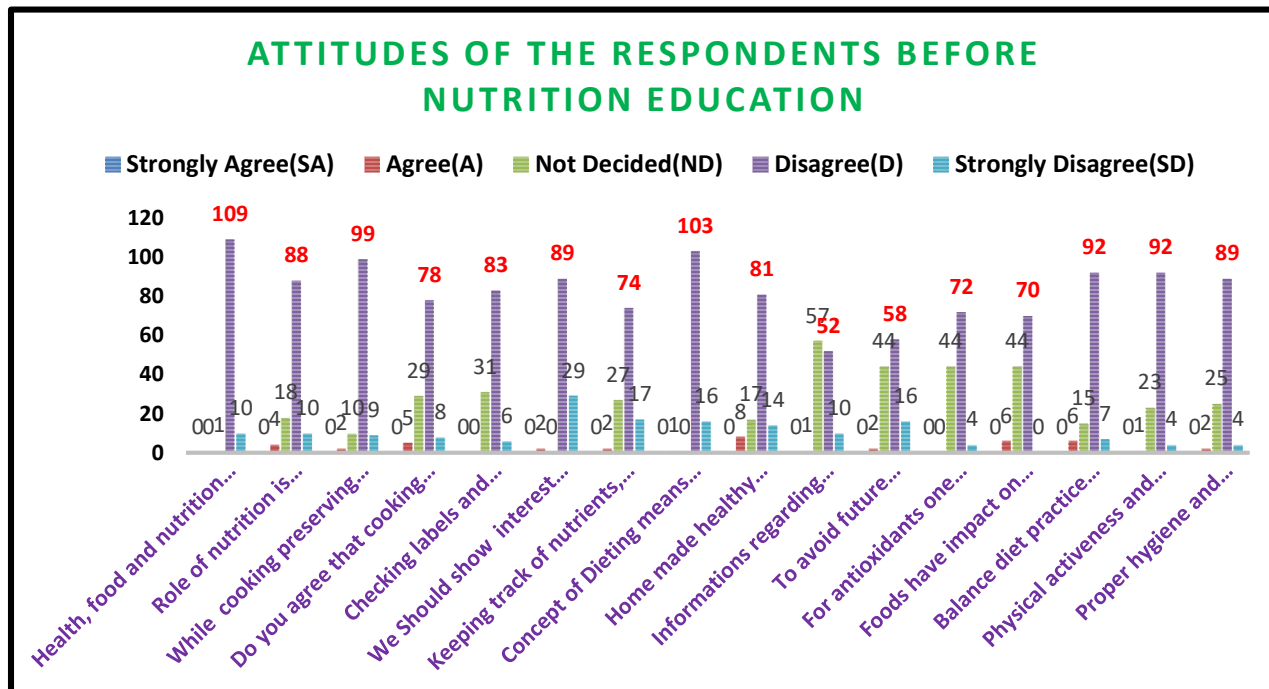


Figure-3 Attitudes of the Respondents Before Nutrition Education

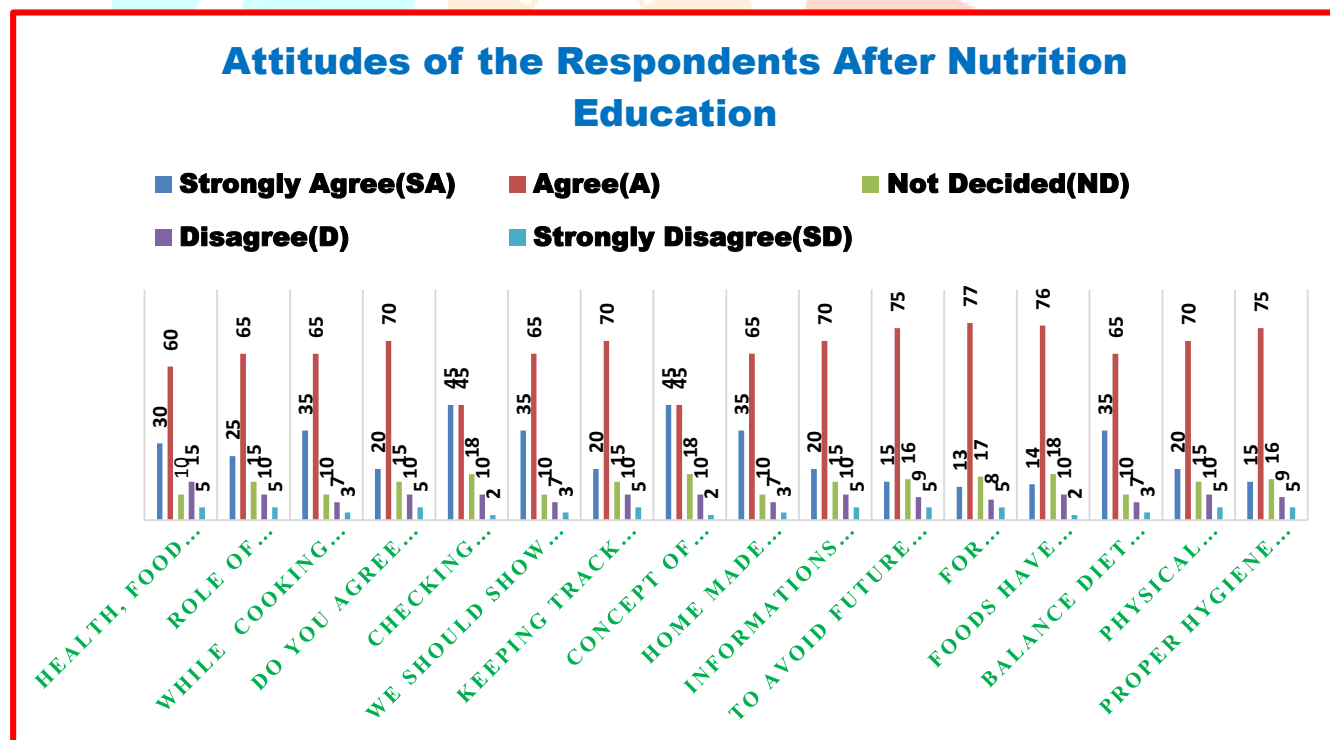


Figure-4 Attitudes of the Respondents After Nutrition Education

Pre and Postmean scores for dietary practices among subjects

Figure 5 and 6 show the impact of Nutrition Education on respondents regarding following various dietary practices. To conduct the study, a total of 120 respondents (College girls) were taken. The respondents were asked a total of **15 questions**, and their answers were logged as efforts to answer each question with a **Yes or No**. It was observed that before the Nutrition Education, most of the respondents, i.e; **117(97.5%)** said **No** to the question “**Attending Government or non-Government nutrition education programme?**” **116(96.6%)** said **No** to the question “**For Proper nutrients interactions right food choices are important.**” and other questions also got **No** answer maximum, A very few “**Yes**” Answer were received for various questions asked

to the respondents. After the Nutrition Education provided to them, Respondents started following the dietary practices and their Answer as “Yes” were increased and the “No” to the asked questions were drastically reduced. (Fig 5 and 6).

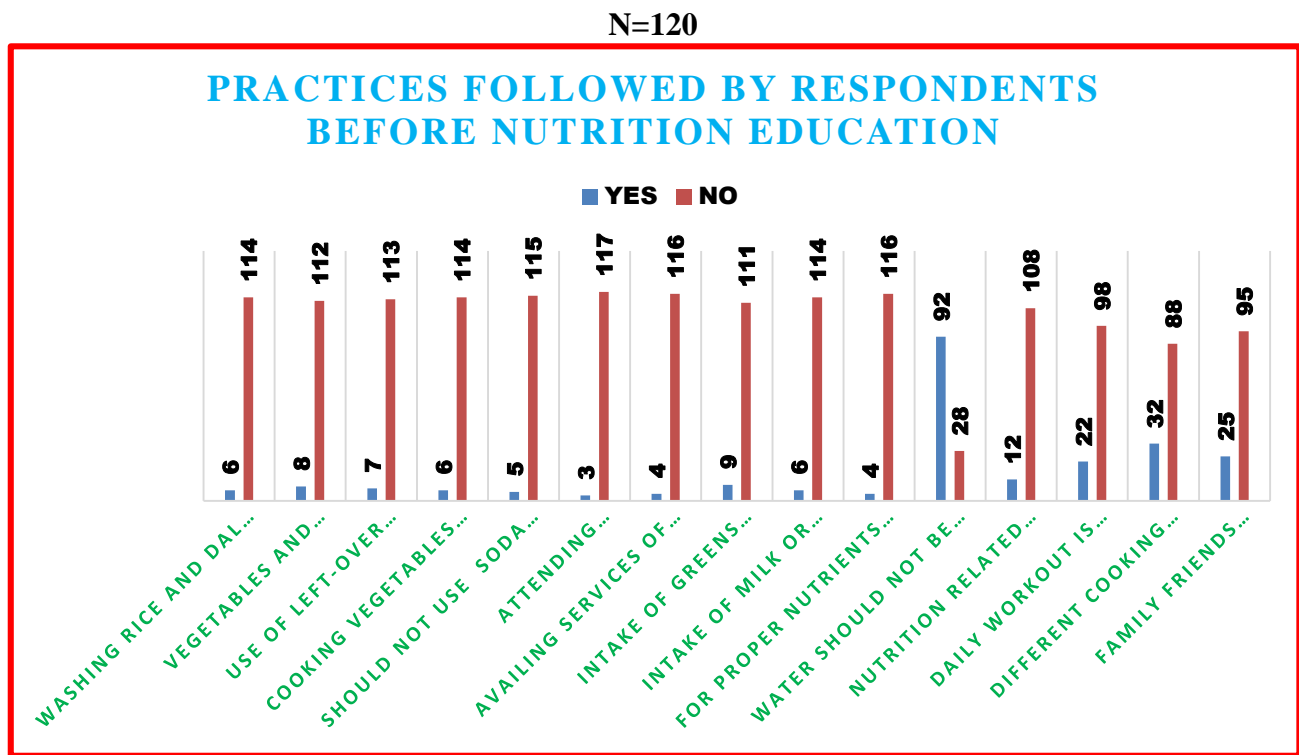


Figure-5 Practices Followed by Respondents before Nutrition Education

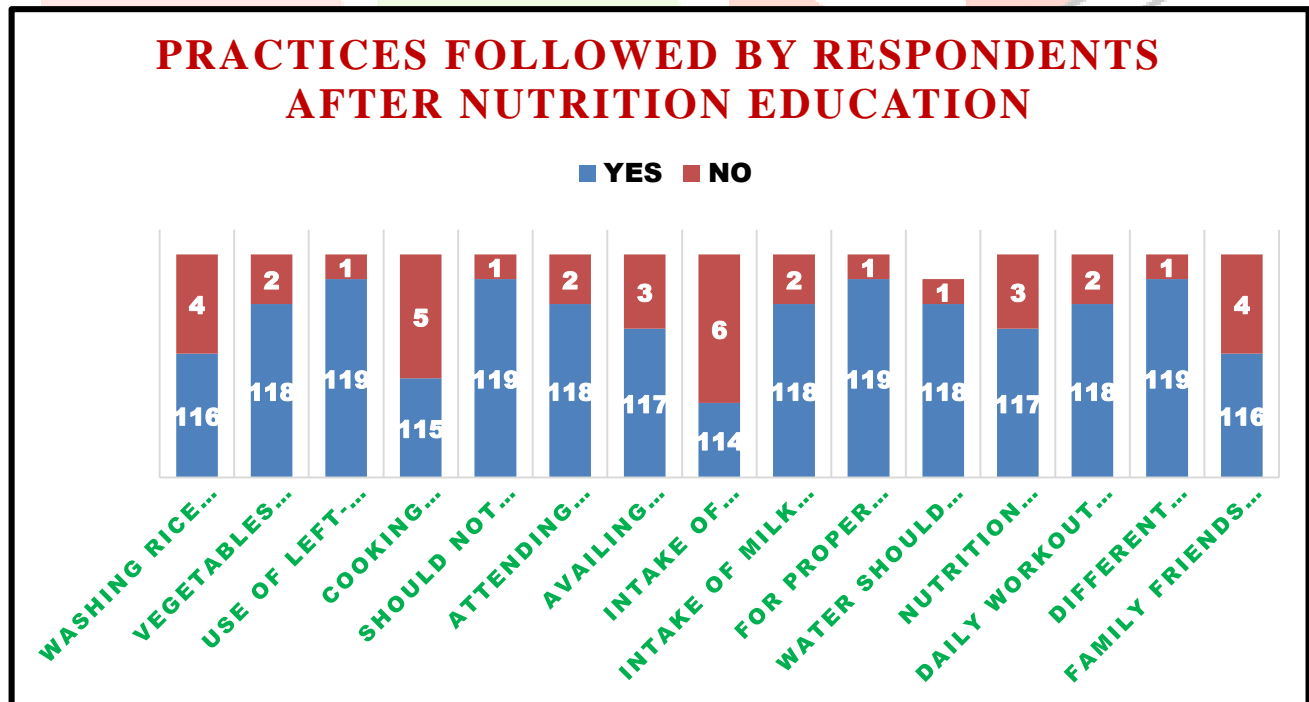


Figure-6 Practices Followed by Respondents After Nutrition Education

VI. Conclusion:

According to the aforementioned study, urban students exhibit poor attitudes and behaviors as well as some distractions from healthy eating habits. Even though they come from well-off families, some people follow disturbed unhealthy lifestyles despite having good knowledge of healthy approaches but inappropriate behavior towards good balanced nutrition due to laziness and peer pressure. Others consume more fast food and outside food than they should, have inappropriate eating schedules and patterns, and focus on their bodies and body image.

Periodically, a nutrition education programme will assist them in reviving. A creative, young, student-centered programme that makes use of cutting-edge teaching tools and techniques will undoubtedly aid in the program's success, while recipes that are simple to prepare, delectable, appetizing, and nourishing with ingredients that are readily available in the community spark students' attention and curiosity.

VII. Acknowledgment:

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