ASSESSMENT OF NUTRITIONAL STATUS AMONG MALE AND FEMALE UNDERGRADUATE STUDENTS OF SAVEETHA DENTAL COLLEGE

ABSTRACT

A report by the National Research Council and Institute of Medicine (NRC/IOM) in the year 2013, warned that chronic diseases are not only adult-onset but are also affecting the younger generation. Improper nutrition, physical inactivity, tobacco use, and alcohol consumption, contribute to the increase in health risk factors. Such unhealthy behaviours are common among young adults. The objective of this work is to assess the nutritional status among male and female undergraduate students of Saveetha dental college. A cross sectional survey of different questions, dietary patterns was conducted with a sample of 184 students (I, II, III, IV, and V students). Survey was conducted via google from through random sampling to identify undernutrition in the sample. Questionnaires were based on dietary health patterns and nutritional status in day to day life. Majority of students are at normal weight and the scores met optimal levels. This suggests good quality and quantity of diet. The aim of the study is to assess the nutritional status among the male and female undergraduate students of saveetha dental college.

KEY WORDS

Nutritional status, health, diet, malnutrition, innovetion, novel

INTRODUCTION

The major determinants of health and non communicable diseases are nutritional status and diet. (1). One of the vital importance in public health is nutritional status. This attracted the attention of economists and other social activists (2) (3,4). Students entering university environments have new social relations and behaviours - eating habits, physical activity- smoking, alcohol consumption etc,(5). This interferes in social, physical and biological problems leading to health problems. The transition to adolescence is an important period for change in behavioural patterns which has a risk factor to chronic disease (6). It is very important to recognise and treat malnutrition because it's consequences include improper functioning of respiratory muscles and renal functions, the contractility of cardiac muscles gets reduced (7). Nowadays, in developing countries one of the serious health problems and highly prevalent is undernutrition (8). This occurs due to the intake of net nutrients is less than requirements (9). It is easy to reach children through institutions such as schools and colleges. We have the responsibility for society to do our best to protect young people (10). College is a critical period where lifelong lifestyle habits are developed, which have a lasting impact on development of chronic diseases (11) (12,13). Nutrition education has a profound impact on dietary habits and food choices in many college students (14) (3). Thus, schools and colleges represent an opportunity for students to learn new skills and lead healthy lifestyle practices. Students will have necessary knowledge and skills which are essential to make healthy lifestyle choices (15) (12). During college years, women face a great pressure to reduce their weight to achieve the 'thin ideal' body. Being thin makes women more attractive to their peers and more likely to gain peers' attention (16) (17). Students need to be healthy, physically active, and well nourished in order to succeed in their academic studies (16,18). Different factors are associated with malnutrition among undergraduates of Saveetha Dental College. One set of factors refers to demographic details such as age, gender and other questionnaires (19). Another set of factors consists of college, year of study etc,. This research conducted on the topic of assessment of nutritional status among male and female of Saveetha dental college has focused on undergraduate students to determine the underweight or malnutrition groups who are at risk of nutrient deficiencies (20). These kinds of surveys and studies will be useful for guiding, planning and also implementing health interventions.(21) The objective or the aim of this research is to assess the nutritional status among male and female undergraduate students of Saveetha dental college.

MATERIALS AND METHODS

A cross-sectional survey was conducted among the dental students with a sample size of 184. A self administered structured questionnaire was prepared based on Nutritional Status among male and female undergraduate students of Saveetha Dental Students and consisted of 11 questions. It was circulated to the students through an online platform (google form). The statistics were done using SPSS software, and the chi-square test was done. The pros of the survey is that the students of various Institutions were surveyed . Children and adults were excluded from the survey. Simple random sampling method was the sampling method used to minimise the sampling bias.

RESULTS AND DISCUSSION

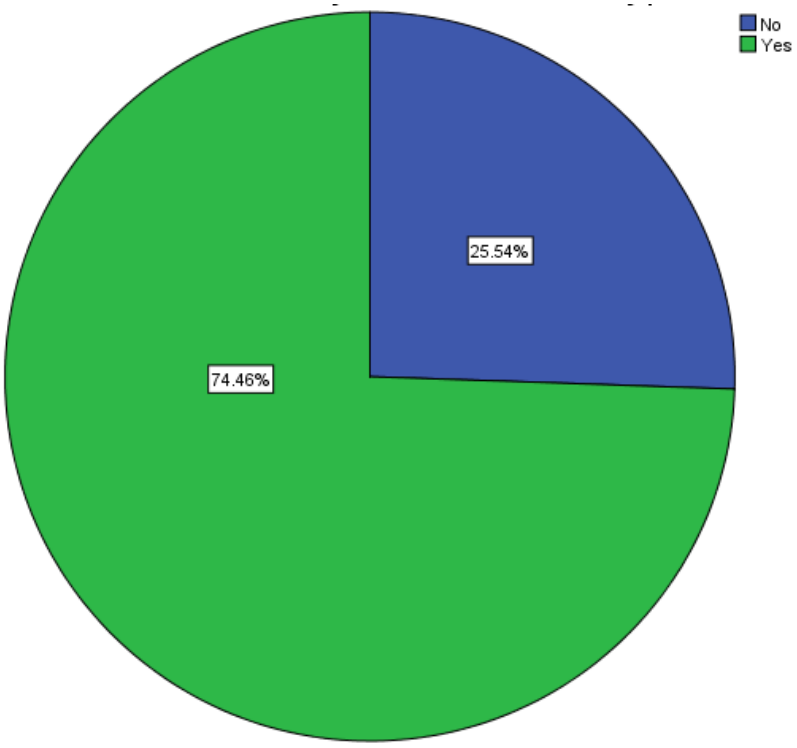

FIGURE 1 Pie chart showing percentage distribution of interest in health dietary patterns. Wherein the green colour represents yes (74.46%) and blue colour represents no (25.54%).

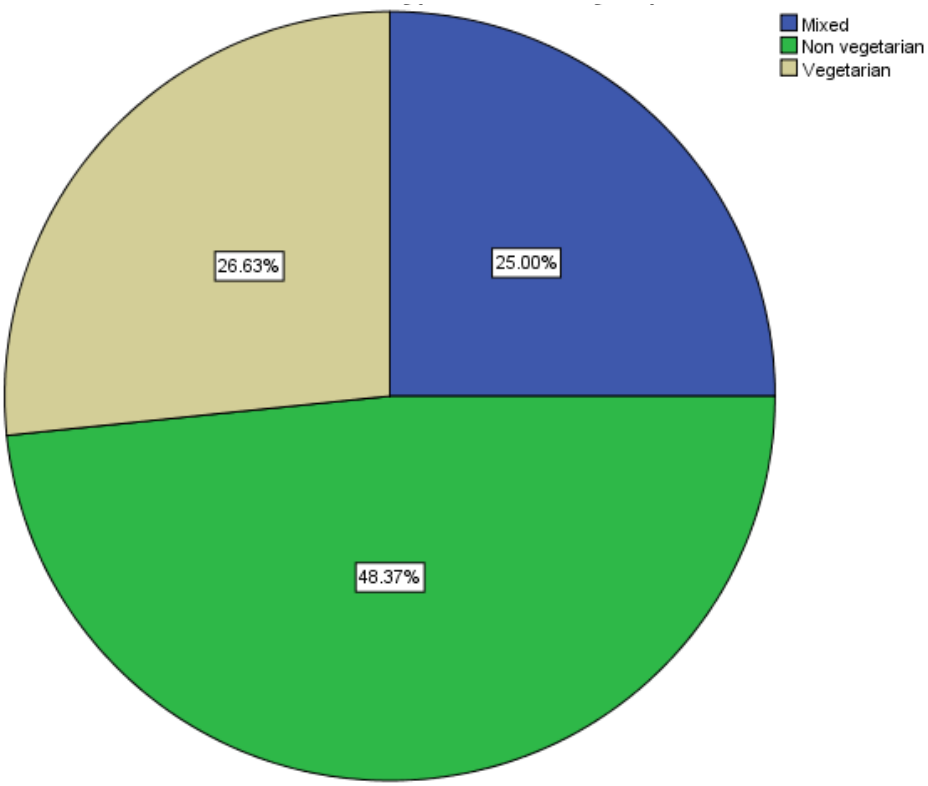

FIGURE 2 Pie charts showing percentage distribution of food preference. Wherein blue represents both veg and non veg (25%), green colour represents non veg (48.37%) and beige colour represents vegetarian (26.63%).

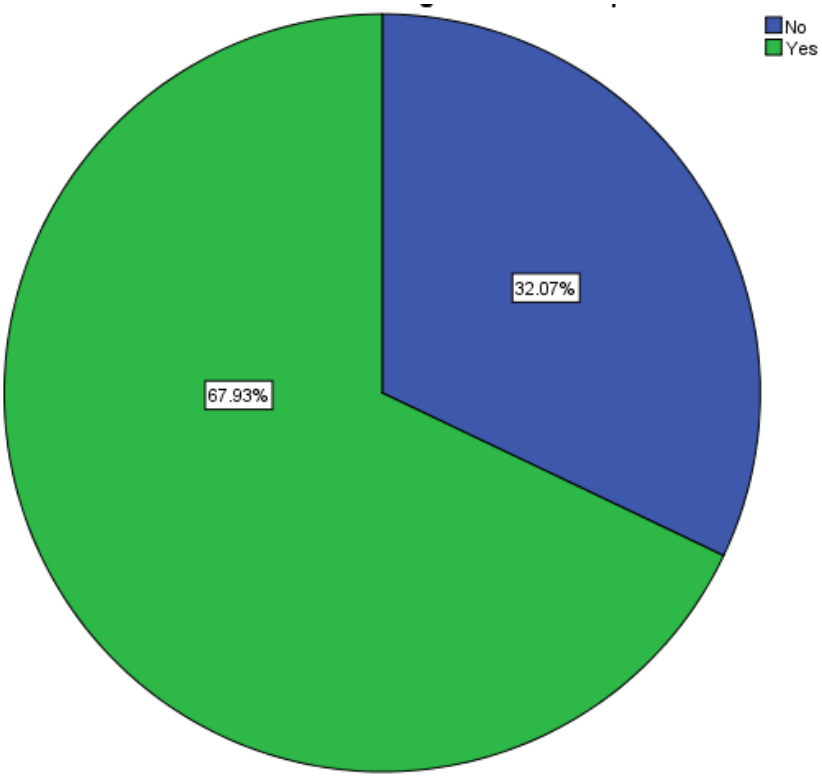

FIGURE 3 Pie chart showing percentage distribution of consumption of milk and milk products. Wherein blue represents no (32.07%) and green represents yes (67.93%).

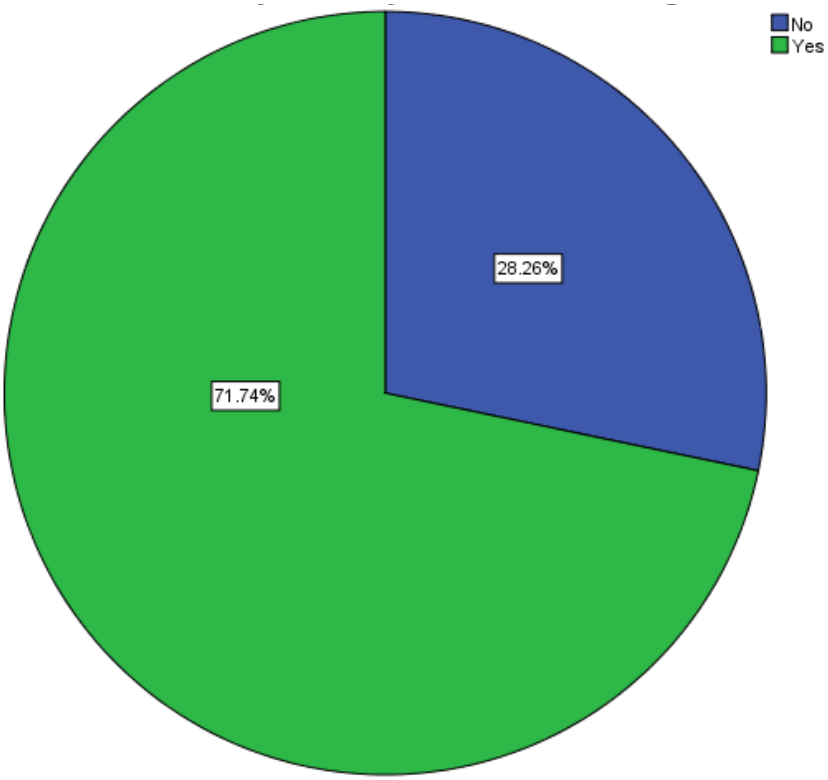

FIGURE 4 Pie chart showing percentage distribution of snacking while watching television. Wherein blue represents no (28.26%) and green represents yes (71.74%).

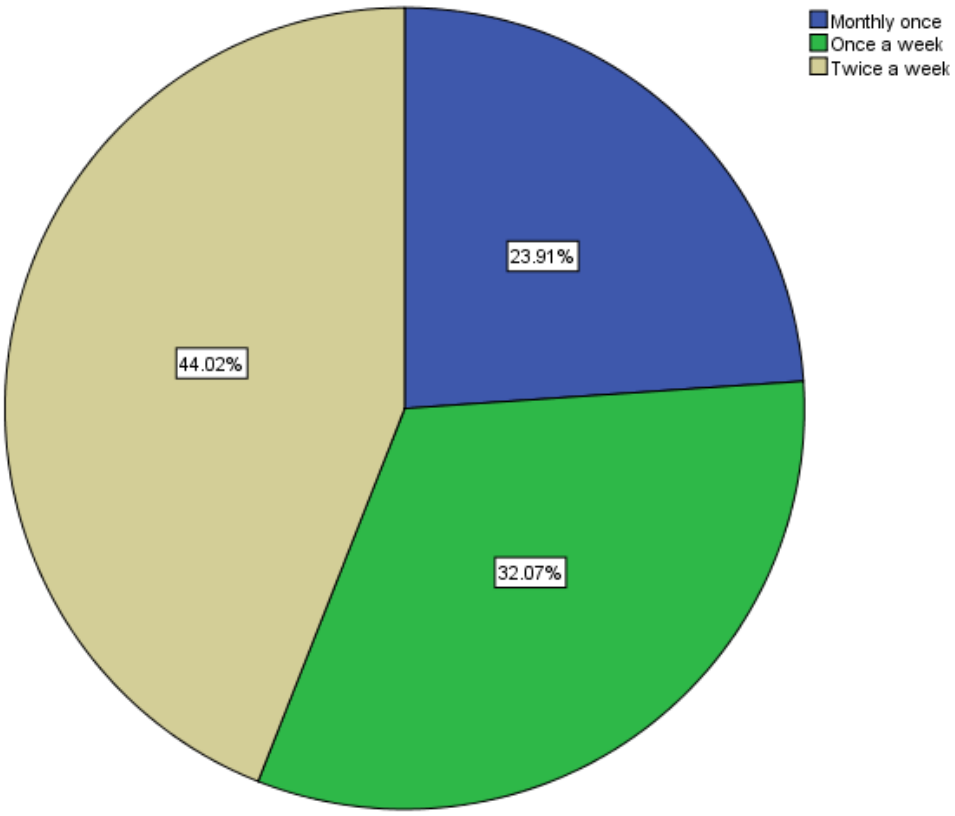

FIGURE 5 Pie chart showing percentage distribution of consumption of bakery products. Where, blue represents monthly once (23.91%), green colour represents once a week (32.07%) and beige colour represents twice a week (44.02%).

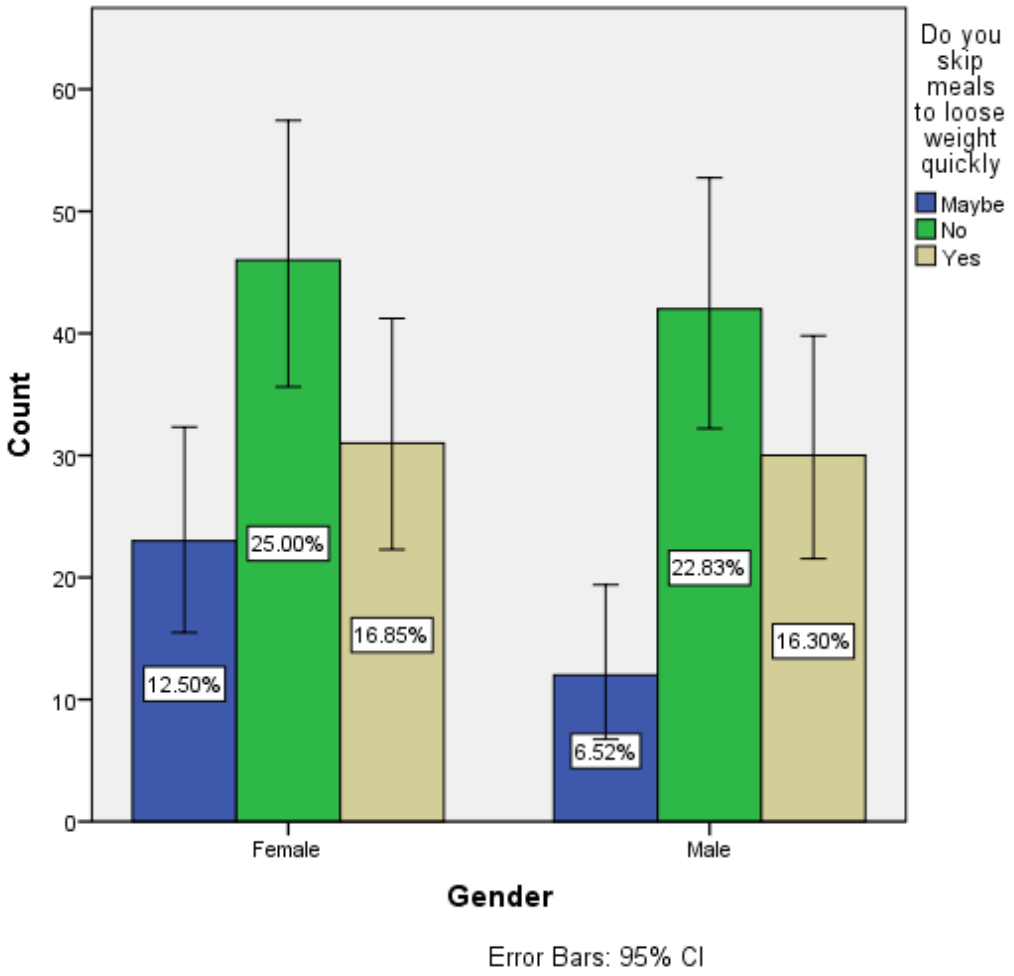

FIGURE 6 Bar graph depicts the association between gender and skipping meals. X-axis represents the gender and the Y-axis represents the number of participants. Blue colour represents maybe, Green colour represents no and beige colour represents yes. 25% of females don't skip their meals, 22.83% of males don't skip their meals. This difference was statistically not significant (Pearson's chi square value : 2.281, p-value : 0.320, ($p>0.05$) - not significant).

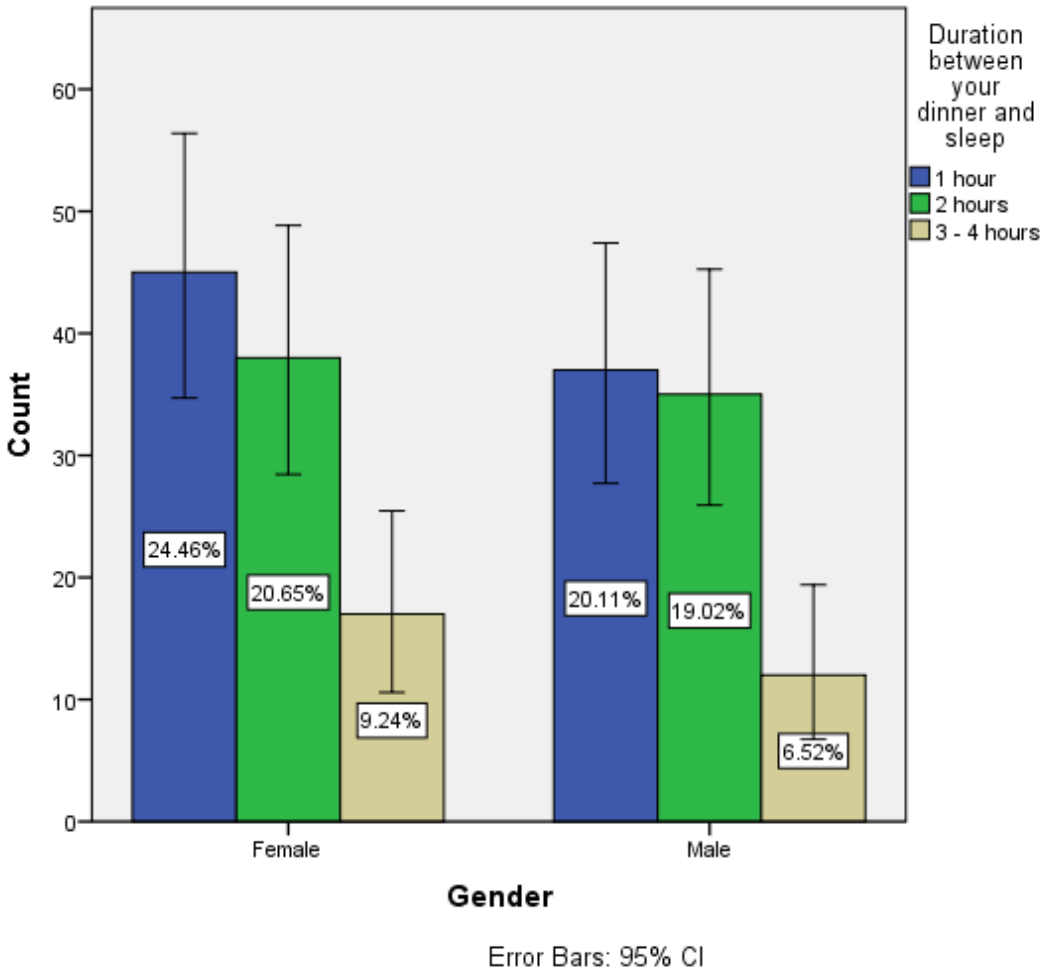

FIGURE 7 Bar graph depicts the association between gender and sleep duration. X-axis represents the gender and the Y-axis represents the number of participants. Blue colour denotes duration of 1 hour, Green colour represents duration of 2 hours and beige colour represents duration of 3 - 4 hours. 24.46% of females have 1 hour duration between their dinner and sleep, 20.11% of males have 1 hour duration between their dinner and sleep. This difference was statistically not significant (Pearson's chi square value : 0.377, p-value : 0.828, (p>0.05) - not significant).

In our study we found that; 74.46% of the population are interested in healthy dietary patterns (Figure 1). 48.37% of the population prefer Non vegetarian (Figure 2). 67.93% of the population consume milk and milk products (Figure 3). 71.74% of the population take snacks while watching television (Figure 4). 44.02% of the population consume bakery products (Figure 5). 25% of females (green colour) don't skip their meals and are statistically not significant (Figure 6). 24.46% of females (blue colour) have a duration of 1 hour between their dinner and sleep. This shows statistically not significant (Figure 7).

This study examined the knowledge of assessing the nutritional status among male and female undergraduate students of Saveetha dental college. According to the survey conducted by google forms, it is observed that students responded are of normal weight and health dietary patterns but There is a slight difference in gender. That is, females are slightly weak compared to males. Compared to other research, the number of males participated was 264 and females was 300 but In this research, females were 100 whereas males were 84. In similar findings by (22) (23) 66% consume milk and milk products whereas 34% don't consume. In this study, 67.93% responded yes and 32.07% responded no. In the research by (22) 8% of males and 9% of females met the recommended dietary intake of at least five servings of fruits and vegetables per day. In this study, 45% consume fruits everyday whereas 8.15% consume fruits in rare cases. The research done by (24) reported that females were more interested in changing their dietary habits and levels of physical activity than male students. In this study, 74.46% are interested in health dietary patterns whereas 25.54% are not interested. From this research, the limitations faced were time lagging and limited information. This establishes to promote nutritional status and dietary patterns among undergraduate students and also provides baseline data for further studies. Dietary health patterns, nutritional status are the factors which play an important role in developing countries like India (25-29). Very few of the undergraduate students who participated are overweight which leads them at risk. Most of the students are normal with proper health and BMI. They are well nourished. (30-35).

CONCLUSION

Developing gender-specific programmes for promoting healthy lifestyle behaviours among students is recommended. In brief, this study provided preliminary data on various nutrition-related factors that can influence students' health. Results can be useful for health educators for designing health promotion and nutrition education programmes aimed at improving students' dietary and lifestyle behaviours. The data shown here is concluded by saying that both male and female students are of normal health. But a slight difference takes place in between them.

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