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Proximate Composition of Nutrients in Dishes Commonly Served by the Canteen at Faculty of
Medicine University of Jaffna

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The main purpose of this study was to analyze the nutritional values of main meals, breakfast, lunch, and dinner served at Medical Faculty canteen. Under this research specifically carbohydrate, protein, fat, crude fiber, iron, calcium and ash contents were analyzed. The nutritional values were compared with actual recommended daily nutritional requirements of adolescent male and female separately and also focused on whether the foods have provided recommended percentage of energy from carbohydrate, protein and fat. Proximate analysis indicated that range of protein content was 0.372-7.175g/100g wet weight, while fat content was below 5g/100g in all the foods (0.12-3.63 g/100g wet weight), carbohydrates ranged between 14.71 and 32.48g/100g and fiber was high in food with red rice (1.16g/100g wet weight). The menu with egg and vegetables had good amount of iron (0.6 mg/100g wet weight). Thosai was a good source of calcium (21.8 mg/100g wet weight). On average the main meals provided a total of 1962.34 and 1294.72 kcal energy to male and female students respectively per day, which were 82 and 76% of the daily energy requirements respectively. The amount of calorie from the foods was insufficient due to low level of fat content. Foods were over loaded with carbohydrate (88 %) due to high flour or rice content in dishes. More than 95 % of food combinations have met the protein requirement for both male and female students. Only 11 % of food combinations had satisfactory level of fat to males and 9.5 % to females. Only 25.5% of food combinations were satisfactory to male students in iron content. All food combinations had low level of iron content than recommended daily amount to female students. None of the food combinations had the daily requirement of calcium and fiber to both male and female students. Menu analysis showed improvement in the menu is required to achieve meal compositions, which can meet the requirement of a balanced diet which can provide recommended daily nutrient allowances.

Keywords: Recommended daily nutritional requirements, carbohydrate, protein, fat, crude fiber