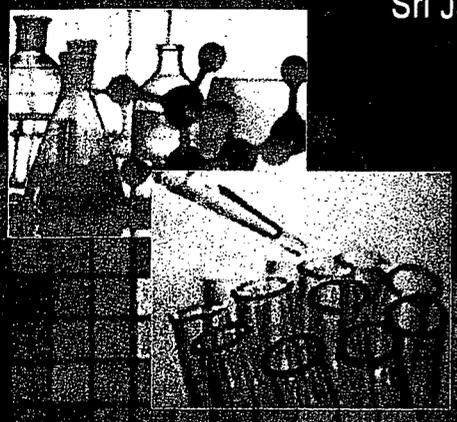
Faculty of Medical Sciences, University of Sri Jayewardenepura

in collaboration with

Sri Jayewardenepura General Hospital



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Assessment of nutritional and energy intake and selected anthropometric measurements among a sample of non-academic staff members in University of Sri Jayewardenepura

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Objectives: The aim was to assess a nutritional and energy intake and selected anthropometric measurements among a sample of non-academic staff members in University of Sri Jayewardenepura.
Methods: The study was carried out with statistically analysed sample number (n=130) of non academic staff members. Study design was descriptive cross sectional. Anthropometric measurements [weight, height, waist circumference (WC), hip circumference (HC)] were taken and Body Mass Index (BMI), waist to hip ratio (WHR) were calculated using WHO methods. The energy requirement was calculated using the basal energy expenditure by Harris Benedict equation. A self administered seven day dietary recall was carried out.
Results: Most of the participants were males (53.9%) and >40 years (54.6%). BMI of females and males were 22.9±3.8 kg/m^2 and 23.1±4.2 kg/m^2 respectively. Higher number of males (16.9%) were overweight than females (15.4%), and a lower number of males (4.6%) were obese than females (6.2%). WC of males and females were 85.9±8.6cm and 82.4±9.3cm respectively. Most of the participants were at high risk of development of metabolic complications based on WC (53.8%) and WHR (63.9%). Carbohydrate, fat and protein constituted 66%, 22.4% and 17.6% of total energy respectively and energy from protein was higher than the recommended levels. Mean energy intakes were less than the estimated energy requirements in females (1630.2±287.6 vs. 1695.0±148.5 kcal/day) and males (2078.0±326.8 vs. 2732.9±250.7kcal/day). Protein intake was higher in 83.8% of the participants than their requirement.
Conclusions: About 40% of the total population is either overweight or obese and further, more than 50% of the population is at risk of development of metabolic complications. Therefore, the interventions and educational programmes need to be set up to control the overweight and obesity and promote the quality

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The body fat percentage distribution in a young adult female population of a Sri Lankan University

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Objectives: To determine the body fat percentage (BF%) distribution in female undergraduates (age group 20-26years) residing in hostels of University of Sri Jayewardenepura (USJP).
Methods: A cross sectional study was performed among 367 females, randomly selected using hostel registries (Obesity prevalence of Sri Lankan females =36.5%). Height was measured using stretch-resistant measuring tape to the nearest 0·1cm according to National Health and Nutrition Examination Survey (NHANES) guidelines. BF% values were taken using Karada Scan®, Body fat analyzer (Bioelectrical Impedance Analysis). Data analysis was performed using SPSS16. Ethical Clearance was obtained from Ethics Review Committee, Faculty of Medical Sciences, University of Sri Jayewardenepura. The cut-off marks were taken according to the manufacturer's specifications.
Results: In study population 4.1% were with low BF% (5%-19.9%), 59.1% were with normal BF% (20.0%-29.9%), 28.9% were with high BF% (30.0%-34.9%) and 7.9% were with very high BF% (35.0%-50.0%). When considering BF% distribution in different areas of the body, the highest fat % was seen in arms with a mean of 40.57% (SD±5.5). The lowest fat% was seen in the trunk with a mean of 19.41% (SD±4.5). Mean fat% in the legs was 35.39% (SD±6.2). High proportion of females (98.4%) had normal visceral fat levels (level of 1-9) and only 1.7% was in the risk level (level ≥10).
Conclusions: Approximately one third of the study population (36.8%), was with a high BF%. Since high body fat content can lead to many disease conditions, they have to be advised on the importance of proper diet schedule and regular exercise.