

DIETARY CONSTITUENTS ASSOCIATED WITH NON-COMMUNICABLE DISEASE RISK FACTORS AMONG UNIVERSITY STAFF MEMBERS

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The epidemic of non-communicable diseases (NCDs) has become a serious economic and public health issue in developing countries including Sri Lanka. However, recent data on prevalence and causative factors of NCDs in different sectors of Sri Lanka is not available. A cross-sectional study was conducted to investigate the association between dietary constituents and NCD risk factors among academic and non-academic staff of Rajarata University of Sri Lanka. The study sample consisted of 145 academics and 165 non-academics, aged between 20 to 65 years. Height, weight, waist circumference (WC) and the blood pressure were measured using standard procedures. Body Mass Index (BMI) cut-off values for Asians were used to categorize the subjects according to weight status. Interviewer administered validated food frequency questionnaire was used to collect dietary information. Mean BMI of the study group was 23.6 kg m⁻² and the mean WC was 84.9 cm. The prevalence of overweight and obesity in academics and non-academics were 21.9% and 2.3% and 27.1% and 3.9% respectively and the incidence of overweight and obesity was significantly higher ($p < 0.05$) among females. Further, 23.2% of academics and 28.7% of non-academics were centrally obese (males WC >90 cm; females WC >84 cm). Prevalence of raised blood pressure in the study group was 14.5% and it was significantly higher ($p < 0.05$) among the non-academics (18.8%) than academics (9.7%). Mean systolic and diastolic blood pressures were 114.9 and 75.0 Hg mm respectively and they were significantly higher ($p < 0.05$) among non-academics than academics. Consumption of fast and processed foods, pulses and fish was significantly higher ($p < 0.05$) among academics while carbohydrates, milk and vegetable consumption were significantly higher ($p < 0.05$) among non-academics. In the study group, consumption of raw unpolished rice, bread, meat, fried food, fast and processed food, coconut oil and egg had a significant positive influence ($p < 0.05$) on central obesity while fish consumption showed a significant negative relationship ($p < 0.05$) with central obesity, raised blood pressure, overweight and obesity. Plain tea and fruit consumption were positively associated ($p < 0.05$) with overweight and obesity. These data suggest that certain dietary factors can predict risk of NCDs, independent of other lifestyle variables.

Keywords: Dietary factors, Non-communicable diseases, Obesity, Overweight, Raised blood pressure