ASSOCIATION BETWEEN DIETARY PATTERNS WITH WAIST CIRCUMFERENCE IN A YOUNG ADULT FEMALE POPULATION IN SELECTED AREAS IN THE SOUTHERN PROVINCE OF SRI LANKA

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ABSTRACT

Recent studies have shown that waist circumference (WC) is the best simple anthropometric index of abdominal obesity and the best index for predicting cardiovascular risks. Changes in diet and lifestyle have a great impact on obesity and obesity related disease risks. Hence, the present study aimed to assess the association between dietary habits and waist circumference in a female population. A cross-sectional study was conducted separately at Hungama and Hiththatiya-Middle Grama Niladhari areas in the southern province of Sri Lanka. Healthy females between 20-50 years of age were selected by systematic random sampling method. 152 participants were selected from each grama niladhari area. Waist circumference was measured for each individual. The cut-off point for waist circumference value for South Asian women is 80 cm (WHO, 2008). Central obesity is defined as waist circumference $\geq$ 80 cm for South Asian women according to the data of World Health Organization (WHO, 1997). An interviewer administered questionnaire was used to assess dietary patterns. The results showed a statistically significant difference between consumption of some food types and WC in the total population. Consumption of red meat, white meat, fish, grain, leaves, fruits, milk, plain tea, yogurt, egg and fast food did not show a significant difference with WC in the total population, according to Pearson Chi-Square test. There is a statistically significant difference between the WC and consumption of red raw rice (p= 0.033), white raw rice (p= 0.048), potato (p= 0.002) and coconut oil (p=0.049) in the total population. WC shows a positive relationship with red raw rice, white raw rice, coconut oil and potato. Prevalence of abdominal obesity in the total population is 47.06%.

Keywords: Waist Circumference**,** Obesity, Under-Nutrition, Dietary Habits, Female