

PREVALENCE OF MENSTRUAL IRREGULARITIES AMONG SRI LANKAN NATIONAL LEVEL FEMALE ATHLETES AND FACTORS ASSOCIATED WITH MENSTRUAL IRREGULARITIES

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Menstrual irregularities affect the health and performance of female athletes. The purpose of this study was to identify the prevalence of menstrual irregularities and to identify the factors affecting menstrual irregularities among Sri Lankan national-level female athletes. The objective of this research was to identify the associations among menstrual irregularities and several factors; body weight, body fat, diet, eating disorders (ED), psychological stress and Resting Metabolic Rate (RMR) of athletes. A sample of 205 national-level female athletes between 18-25 years was selected from 20 competitive sports. "EAT-26" and "Perceived Stress Scale" questionnaires were used to identify ED and stress level of subjects, respectively. A three-day dietary record was used to determine nutrient intake. Body weight, body fat and RMR of subjects were also recorded. Spearman's rho correlation and binary logistic regression were conducted to analyse data. Body

weight, ED, stress level, RMR, energy intake and sodium intake were associated with menstrual irregularities ($p < 0.05$). Additional analysis indicated that body weight had relationships ($p < 0.05$) with body fat, RMR and diet (water, sodium, vitamin A, vitamin E, vitamin B6 and folic acid). Further, significant relationships were observed between body fat and RMR, body fat and diet (water, sodium), ED and psychological stress, psychological stress and diet (calcium, vitamin B12, Iron, Zinc, fat and vitamin B6), and RMR and diet (carbohydrate and iron). It can be concluded that factors such as body weight, ED, stress level, RMR, energy intake and sodium intake are associated with menstrual irregularities in Sri Lankan national-level female athletes and the associated factors are related to each other.

Keywords: Menstrual Irregularities, Eating Disorders, National Level Athletes