

Macronutrient intake of national level athletes engaged in leanness and non-leanness sports

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Nutrient intake is a significant factor affecting the performance of athletes. In most of the weight-category sports, athletes tend to fluctuate their body weight by altering their diets to achieve competition goals. The aim of this study was to determine the differences between national level athletes engaged in leanness and non-leanness sports with respect to macronutrient intake. This research was a cross-sectional survey and stratified random sampling method was used to select the sample which included 265 national level athletes representing 10 different sports (134 from leanness sports, 131 from non-leanness sports). The selected leanness sports were Karate, Weightlifting, Judo, Wrestling and Boxing. Non-leanness sports included Baseball, Volleyball, Rugby, Hockey and Football. The 24-hour dietary recall method was used to gather information about daily food intake of participants. Diet records were converted to daily nutrient intake values based on food composition tables. Mann Whitney U test was carried out to determine the differences in macronutrient intakes of athletes engaged in leanness and non-leanness sports. According to the results, the majority of athletes reached the acceptable macronutrient distribution ranges (AMDR) for carbohydrates (84%), proteins (96%) and fat (80%). Nevertheless, daily energy, carbohydrate, protein and fat intake values of athletes engaged in leanness sports were lower ($p<0.05$) than those of athletes engaged in non-leanness sports. The study identified some differences in nutrient intake among Sri Lankan national level athletes engaged in leanness and non-leanness sports and suggests a need for developing strategies in counseling and teaching of athletes to improve their nutrient intake.

Keywords: Leanness athletes, macronutrient intake, non-leanness athletes

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