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# Nutritional status of sport persons

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The diet and nutrition in relation to specific athletic activity and performance, energy intake and its relation to energy expenditure for specific activity and the like is not available. Though a few reports are available on the diet and nutrition of Sport persons, for Indian sport persons more information need to be unearthed along these lines, for drawing any definite conclusions on their diet and nutritional requirements and optimum performance. This paucity of data on sport persons nutrition enthused the investigators to pursue the present study. Thirty state and national level male sport persons from Kolhapur city of Maharashtra State, ten sport persons from each sports discipline namely athletics, basket ball, holly ball were chosen for the entire study. The heights and weights of the subjects were measured using a stadiometer and beam balance scale, respectively and their body mass index (BMI) was calculated. The skin fold thickness at specific sites of the body *viz.,* triceps, scapula and abdomen were measured using a Harpenden skin fold calipers. The fat content was determined by body density technique (BD) using formula predicted by Katch and Mc Ardle. The lean body mass (LBM) was calculated by subtracting the per cent fat from the body weight. All the sports persons had normal BMI (20-25) except the athletes persons and basketball events who had low weight normal BMI (18.5-20). None were found to be obese (BMI > 25). Majority (18 out of 20) of athletics and basket ball persons had acceptable body fat per cent (7-15%) whereas majority (7 out of 10) of the holly ball were lean (*i.e.*<7% body fat). Except the athletics persons the energy requirement of basket ball and holly ball did not meet the RDA. Maximum energy was expended for the sports practice by the athletes.

**Key Words :** Sport persons, Body mass index, Lean body mass and RDA

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## INTRODUCTION

Sport persons and sports are receiving increasing global attention today. Top class sport persons are more or less equal in still but during competition, success is achieved by the one who possesses better physical fitness for which nutrition plays an important role.

The science of nutrition in relation to sports performance has progressed from empirical studies investigating the effects of dietary manipulations, such as restriction and supplementation, to the direct investigation of the physiological basis of the specific nutritional demands of hard physical exercise (Chandrasekhar, 1987). Throughout the years, athletes in training for competition have constantly been searching for the ultimate ingredient which would increase their physical performance capacity and may give them that extra winning edge over their opponents. Physical fitness is one's richest possession. It cannot be purchased, but has to be earned through daily routine of physical exercise. Nutritional and medical support is essential for the realization of the athletes natural capacity for optimal performance (Johnson and Nelson, 1982).

Sharma and Costill (1984) shows that sport persons the right diet for sports is a well balanced diet. The athlete needs a balanced diet to keep in good health, to grow, to exploit his potential to the full and to obtain the best results. There are no "miracle" diets or foods guaranteed to give "super performance". However, in translation of recommended nutrient allowance into diets for sportsmen and women, the same basic principles as in planning the diets for normal individuals need to be considered. An athlete derives his energy requirement from his food and expends his energy through physical activities.

There is a general agreement on the relative nutrient demands of the sport persons concerning the percentage of energy to be derived from proteins, fats and carbohydrates,

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