11. Yoga

**224 AEROBIC AND ANAEROBIC PERFORMANCE
IMPROVEMENT THROUGH YOGIC PRACTICE**

M Saha, O S Tomer, K Halder, A Pathak *Defence Institute of Physiology and Allied Sciences (DIPAS), DRDO, Timarpur, Delhi, India*

10.1136/bjism.2010.078725.224

Literature supports the impact of yogic practice on physical performance especially, the aerobic aspects. The study therefore attempted to compare the effect of 3 months yogic practice on aerobic and anaerobic capacity. Healthy young male volunteers of age 21–33 years, height 174.8 ± 3.52 cm and weight 69.6 ± 7.17 kg (mean $\pm$ SD) were participated in this study (64 volunteers for anaerobic ($n_1=64$) and 21 volunteers for aerobic ($n_2=21$)). The yoga training imparted by certified yoga teacher included the practice of yogasanas, pranayamas, meditation, mudra and bandh for 2 h in the morning and $1\frac{1}{2}$ h in the evening during the weekdays. Wingate Anaerobic Test protocol was applied for the prediction of peak and average anaerobic power. The device consisted of a mechanically braked bicycle ergometer and a software controlling the test. Aerobic performance was assessed by submaximal exercise for 5 min on a bicycle ergometer with a fixed load of 150 w and cycle speed 50 rpm. Heart rate was recorded at rest, 5 min of exercise. Body mass index (BMI) was calculated as the ratio of weight to height squared. After 3 months body weight and BMI decreased significantly ($p < 0.05$). After training, heart rate decreased non-significant by 5.10%, at 5 min of exercise as compared to that before training. Peak and average anaerobic power (Wingate Test) improved significantly ($p < 0.05$). The study revealed that 3 months continuous yogic exercise resulted improvement in anaerobic capacity of individuals, as compared to aerobic capacity.