The aim of this master thesis is to evaluate the influence of a six-week HIIT (High intensity interval training) on body composition and both aerobic and anaerobic performance. A group of 9 men aged 28-51 years was gathered and who followed an exact six-week training programme according to the chosen hypothesis. The results of our study show that the chosen six-week programme led to statistically significant (p < 0,05) changes in body weight (kg), BMI (kg/m²), in FEV (l), and ANC/kg (J/kg). Changes in the other parameters were statistically not significant. Taking into account the size of group (n=9) we conclude that mainly effects on the individual level were attained.