

Theoretical part of this thesis is focused on a heart rate, especially its parameters, measurement methods and regulation. Moreover describes maximal heart rate issue. Practical part was performed as an experimental measurement of maximal heart rate level of 40 healthy adult probands (20 men and 20 women) between the ages of twenty and forty. Maximal heart rate was measured by telemetry meter FT4 Polar ® in 3 types of exercise tests – running, ergometer cycling and swimming. Results were statistically processed. Study confirmed significant differences in maximal heart rate during running, ergometer cycling and swimming. Highest heart rate was reached while running for 95% of measured volunteers and the lowest heart rate was reached during swimming for 98% of probands. The objective of this thesis was a comparison of reached heart rates during different exercise tests and highlight the evidence of dissimilar maximal heart rate during different exercises.