

## **ABSTRACT**

**Title:** The influence of breathing strategy on sticking region during the bench press exercise.

**Objectives:** The aim of this work is to determine the differences in duration and track that are necessary to overcome the sticking region while using variations of breathing patterns and loads during the bench-press exercise. The next goal is to find out whether the sticking region occurs in the bench-press with resistance of 1 RM, 4 RM, 8 RM and 12 RM.

**Methods:** In this thesis I used a method of experimental research combined with method of analysis. Method of randomized experimental research was applied during the actual research in preset conditions in the sports laboratory. Later the collected data was analysed and evaluated using specialized software.

**Results:** In the empirical part of this thesis I found out that there are significant changes in duration and track of the sticking region and its parts after modifying the breathing pattern during bench-pressing with maximal resistance ( $p < 0,05$ ). The Valsalva maneuver proved to be the best breathing technique in relation to overcoming the sticking region. There seem to be no significant changes in the characteristics of the sticking region and its parts while using different breathing patterns and lifting submaximal loads (4 RM) ( $p > 0,05$ ). This study also found out that the sticking region is not evident in the lift with resistance of 8 RM and 12 RM.

**Keywords:** bench-press, sticking region, breathing pattern