

SUMMARY

Title: Influence of POWERBREATHE on changes in respiratory parameters by swimmers

Objectives: The goal of bachelor thesis is what influence has Powerbreathe on changes in respiratory in swimmers. It will be also determined if a group of better-performing swimmers will achieve statistically better results from Powerbreathe. Last goal will be find out if training with Powerbreathe by instructions influence statistically improvement measure results.

Method: Data were collected before start of research and after from Powerbreathe. Results are processed to charts and evaluate into software SPSS in statistics method pair T-test and non-paired T-test for two files.

Results: In the analysis, we concluded that there are no statistically significant differences between the TOP swimmers and the REPRE swimmers when we were comparing the results of the values measured on the Powerbreathe. Furthermore, we did not find statistically significant differences when we were comparing the results of the values measured before and after the test. The results did not change even if we split the group into a group of performance better TOP swimmers and performance worse REPRE swimmers.

Key words: Powerbreathe, breathing, swimming, performance