

## **Abstract**

**Title:** Analysis of butterfly swimming technique

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**Objectives:** The goal of the thesis is to provide recommendations for the application of swimming drills, correction of errors and correction of the technique of the selected swimming stroke through the analysis of the swimmer's technical performance. As part of the analysis, we focus on checking individual body segments, their position and movements, which significantly affect the efficiency of movement.

**Methods:** The analysis of the butterfly swimming technique was carried out in the Tyršův dům swimming pool, Újezd 450/40, 118 01 Malá Strana, where a video recording of swimming locomotion was taken from the side under the surface, from the side on the surface, from the front under the surface and from the front on the surface. The obtained video recordings were subsequently analyzed using Kinovea software. Subsequently, technical drills were designed to correct the detected mistakes, and after the intervention program, video recordings were taken again. Based on the comparison of both records, an evaluation was also made in relation to the swimmer's model technique.

**Results:** The results of the research show that analyzing and providing feedback using video footage had a positive effect on selected swimmer. After eight weeks of intervention, the swimmer was able to swim reliably using two kicks per one stroke cycle. The second and third mistake (the position of the hands in the preparation phase of arm stroke and the position of the head during breathing in) would still need to be improved by the swimmer. From the results, it is clear that she understood the mistake, but she has not yet mastered the correct technique enough to maintain it during each movement cycle.

**Keywords:** analysis of swimming techniques, study, research, swimming, diagnostic