

## **Abstract**

**Title:** Running in the context of developmental kinesiology

**Objective:** The objective of this diploma thesis was to describe the running gait in the context of human developmental ontogenesis. From information sources working with the topic of developmental kinesiology, a comprehensive text was prepared on the influence of establishing posture on the subsequent development of locomotion patterns of walking and running.

**Methods:** The compilation method was used in this work. Relevant peer-reviewed articles were drawn upon to identify current information on running kinesiology for subsequent interdisciplinary comparison of approaches to the definition and description of the running stride cycle.

**Results:** In the thesis, it was repeatedly emphasized that reaching the float phase in a running gait is a genetically conditioned in a person's life. The thesis that the central control of postural-locomotor function is already engaged in the first year of life thanks to genetically encoded programs. In parallel with how the musculoskeletal system strengthens during the first year of life with the aim of overcoming gravity and achieving bipedality, the strength of functional control at the level of the CNS.

**Key words:** step cycle of running, running, locomotion, posture, kinesiology of running