

## **Abstract**

The diploma thesis deals with the possible influence of barefoot (or minimalist) shoes on the kinesiological parameters of gait and possible changes in the stability of gait and standing. The theoretical section briefly describes the anatomy of the human foot, foot arches, foot movements and the gait kinesiology. The next chapter deals with the issue of walking in barefoot shoes and explaining the basic parameters of barefoot shoes. The theoretical section concludes with a summary of the results of studies already conducted on this issue. In the practical part, we did our own research on selected gait and standing parameters, which can be affected by changing the shoe type. Participants switched to a period of approximately six months from wearing conventional shoes to barefoot shoes, and the measurements were taken twice, before and after adaptation to barefoot shoes. To objectify the results, the same measurements were taken in a control group that did not change shoes. Five parameters were selected to evaluate changes of gait and three parameters related to standing stability.

## **Keywords**

Barefoot, minimalistic shoes, gait, gait analysis, stance analysis, stability