

## **Abstrakt**

Lower limbs are under the influence of relatively symmetrical loading of gait, and even so there has been evidence of bilateral asymmetry of lower limb bones in skeletal remains. The goal of this study was to search literature for possible causes of bilateral asymmetry found in dimensions of lower limb bones. This bachelor's thesis views bilateral asymmetry of lower limbs of living human from a perspective of bilateral activities, such as walking, squats and jumps and from a perspective of unilateral activities, for example kicking in football and in Taekwondo. 59 scientific articles were used in total to write this bachelor's thesis. Results of scientific articles show, that one possible cause of bilateral asymmetry of lower limb bones is preference of the lower limbs for unilateral activities. According to kinesiological articles, the unilateral kicking activity creates great mechanical loading in hip, knee and ankle joints of the kicking lower limb.