

## **ABSTRACT**

The aim of this work is to find what influence sensomotoric exercise has on the shape of feet. The research was carried out within a group of children from the football class. I compared changes in the size of feet contact surface, for which I used the instrument Footscan. This was my main checking method.

### **The research and methods**

14 boys in the age of 7-9 took part in the experiment. This group got through four month lasting moving program focused on improvement of the feet function. The entrance and final testing included kinesiology analysis, clinic and instrument examining and feet contact surface scanning.

The medial measuring system Footscan was used for taking measurements and results data, which provided the necessary level of objectivity for the evaluation of the effect of exercises. I used the instrument Footscan® by RSscan International from Belgium and the scanning desk, size 400×500 mm interface Footscan® 2D box-a software Footscan® Single Step.

### **Hypotheses of the work**

1. We suppose that the percentage of postural disorders will be lower within the active sporting children than within the rest of population.
2. We suppose that there also appear postural pathology in the area of pelvis and in the upper parts of trunk by those children who are flat-footed.
3. We suppose that four month lasting moving program can positively influence at least 50% of individuals who were diagnosed some disorder at the beginning.

### **The results of the research**

During the entrance examination each of the 14 boys was found some deviation, i.e. 100%. They all had also some other postural disorders. All of them went through the moving program for the whole time period and they also went through the final examination. Here we found the improvement in the case of 6 individuals.

**Key words:** sensomotor stimulation, Footscan®, foot disorders, flat-footed, moving program.