The biologically active vitamin D metabolite is essential for the human body. And it is involved in the regulation of the function of most human cells. It is believed to affect up to 900 genes transcription. Thus, its insufficient amount may contribute to the pathogenesis of many diseases. It regulates calcium homeostasis, participates in bone development, and maintains optimal bone status. On the basis of the new knowledge of vitamin D, his out-of-bone effects are currently at the forefront. These relate to the immune system, metabolism, the nervous system, and the effect on the developing fetus. The aim of this work was to create a comprehensive overview of the effect of vitamin D on the young organism. And then, on the basis of questionnaire research, support or refute the hypothesis that children suffer from vitamin D deficiency in winter and spring. The secondary objective of the thesis is to create promotional material that contributes to increasing the interest of parents and older children in this issue and improving their awareness. Based on the knowledge of the effects of vitamin D, a questionnaire survey was conducted with eleven questions related to vitamin D. The research sample consisted of 134 children aged between three and fifteen who were divided into three groups by age. The results of the research are approximately the same as the results of the SZÚ 2016 study, which showed that Czech children suffer from vitamin D deficiency in winter and spring.