

## **ABSTRACT**

**BACKGROUND:** Allergy is currently becoming quite common disease, especially in the childhood and its prevalence is still increasing. Risks and factors have been described for more times already. Clear definition has not been demonstrated yet, that's why it is necessary to specify and expand circumstances which influence arising of allergies.

**AIM:** To compare the group of allergic children with the group of non allergic children with different risks influencing the arising of the allergy. Expanding of the risks can help us, where to direct the individual sub-studies.

**METHODS:** There were sent 4000 structure and anonymous questionnaires to the czech basic schools, mentioned for parents of children who were born between 1995 and 1999. 1697 questionnaires returned back, 1655 of them with qualified dates were evaluated. Altogether 42 questionnaires could not be included in the evaluation as they were empty - any of the required answers were fulfilled. We were concentrated in the group of 418 allergic children and 759 of non allergic children. Children were marked as allergic, if they met any of allergics from their age of 2 years all at once or they were treated and they were forced to visit an allergologist or immunologist at the same time.

**RESULTS:** Under risk factors belongs : taking medicaments during the gravidity, having stress and unpleasant situations, taking multivitamins preparations or paracetamol drugs and drugs in generally, presence of eczema by mother . We did not prove the influence of the urological and gynecological inflammation, using of ATB, mother's weight before the child birth, putting on weight, height, age of a mother by the child birth, influence of birth weight or caesarian operation. Neither the smoking factor or contact with animals during the pregnancy or food consumption did not confirm it.

**CONCLUSION:** In this study we proved, that during the evolution of the fetus there are some risks of allergies. Uterine life is the most critical moment in evolution programming. Environmental exposure may have the biggest potential to influence the developing structure of a fetus, the function and immunity. Other extensive studies are required to fully understand the causal links between fetal growth and the development of allergic diseases.