

# ABSTRACT

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Title of Thesis: The influence of course of pregnancy on the risk of allergies in children - comparison studies in 2005 and 2011

**BACKGROUND:** Factors that influence the development of allergies in children have been described many times before. We aim to provide further precision and comparison.

**AIM:** To compare data from two questionnaire studies from 2005 and 2011 and examine the impact of risk factors during pregnancy on the development of allergies in children. To confirm or disprove the influence of each factor.

**METHODS:** In 2005, 3845 structured and anonymous questionnaires were distributed and 2050 were returned. In 2011, 3000 questionnaires were distributed and 1655 of them were returned duly completed. The questionnaires were sent to parents via primary schools in the Czech Republic. Children who satisfied both conditions: having an allergic reaction before the age of two and being treated or seen by an allergist or immunologist were classified as suffering from an allergy.

**RESULTS:** The following pregnancy factors were labelled as having statistically high influence on the development of allergies in children: nausea during pregnancy, high-risk pregnancy, febrile illnesses, urological inflammation, eczema, taking paracetamol and antibiotics. The influence of the following factors on development of allergies was not proved: child's sex, mother's weight before pregnancy, weight put on during pregnancy, mother's height, gynaecological inflammation during pregnancy and consumption of meat, peanuts, artificial sweeteners and fish during pregnancy.

**CONCLUSION:** This study shows that there are many factors during the prenatal period that influence the development of allergies in children. Standardisation and unification of individual study methods in different countries would contribute to more accurate results and to final confirmation or disproof.