INTRODUCTION: The aim of the study was established due to frequent coincidence of asthma with gastroesophageal reflux (GER), GER with food allergy. It was also based on the hypothesis that microaspiration in patients with asthma and GER results in enhancement of inflammation within the respiratory tract, the increase in bronchial hyperreactivity and induction of specific IgE production by food allergens contained in aspirated contents and sensitising T-cells in peribronchial lymphoid tissue.

OBJECTIVE: The aim was to evaluate significance of food allergens in ethiopathogenesis of bronchial asthma with concomitant GER.

MATERIALS AND METHODS: The study group - 98 children with atopic asthma at the age 8 months – 18 years. The control group - 40 children with abdominal pains. Every child had a 24 hour pH monitoring, using Microdigitrapper (Synectics Medical). In each child a detailed questionnaire examination and skin prick tests with aero- and food allergens were performed and the level of total and specific IgE was determined using the CAP System FEIA method.

RESULTS: GER was recognised in 44 (44.9%) children from the study group and in 5 (12.5%) children from the control group. On the basis of the questionnaire it was demonstrated that asymptomatic GER was present in 72 (73%) children with asthma. Positive skin prick tests with aeroallergens were observed in 69 (86.3%) children. In 13 (16.3%) patients positive skin prick tests occurred with food allergens. The higher level of IgE was found in 87 (88.8%) children Positive results of specific IgE with food allergens were found in 16 (16,3%) children Food allergy was recognised in 10 (10%) children with asthma.

CONCLUSIONS: GER often coexists with bronchial asthma in children. There is no correlation between GER and the degree of severity of asthma. Food allergens, although not often considered in asthma ethiopathogenesis, might play a crucial role in induction of allergic reactions within the respiratory tract, however, significant differences between children with asthma and concomitant GER and without GER were not observed.