

AGE AT MENARCHE AND RISK OF ALLERGIC DISEASES

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Several studies have suggested a relationship between the age at menarche and respiratory health, but the results are controversial. The present study explores the effect of age at menarche on the prevalence of allergic diseases, especially allergic rhinitis, during early adulthood. The research was conducted among 1323 female university students, aged 19–25 years. The measurements of body height, body mass, waist and chest circumference were taken. Each person completed a questionnaire. The occurrence of allergic diseases was determined on the basis of answers to the questions whether the allergy and allergic rhinitis were defined on the basis of medical work-up. Age at menarche was established by means of the retrospective method.

No differences in the prevalence of allergic diseases in relation to the age at menarche were found, however, among the early maturing women slightly more cases of allergy were noted than among average and late maturing ones. Allergic rhinitis was more frequent in early-maturing students. Additionally, allergic rhinitis occurrence and its association with early menarche was analysed using logistic regression, adjusting for BMI, waist to height ratio and socioeconomic factors. The risk of allergic rhinitis was significantly higher in early maturing women than among average and late maturing women (OR=1.61 vs. OR=1 (Ref.) vs. OR= 1.23, $p=0.0198$). Difference remained significant after adjusting for general and abdominal adiposity levels ($p=0.0500$) and socioeconomic status ($p=0.0012$). The results show that early menarche is a risk factor for allergic rhinitis at early adulthood in this cohort.