

Correspondence

Reply

To the Editor:

We would like to thank Hyvärinen et al¹ for their interest in our work and are pleased to comment on their findings.

Hyvärinen et al¹ studied the association between overweight status and asthma in schoolchildren, and they observed that their results differ from our results on the same topic. In our study a high body mass index (BMI) at 6 to 7 years was associated with dyspnea and bronchial hyperresponsiveness at the age of 8 years.² A high BMI earlier in life did not increase the risk of these outcomes if the child subsequently was of normal weight.

There are substantial differences between the 2 studies with respect to the study population and design, and there are also differences in the outcome variables studied. Hyvärinen et al¹ followed a cohort of 92 children who were hospitalized for wheezing during the first 2 years of life. In their study population 51% of the children had doctor-diagnosed asthma at the age of 4 years, and 41% had doctor-diagnosed asthma at 7 years. In the Prevention and Incidence of Asthma and Mite Allergy (PIAMA) study we followed a birth cohort of 3756 children whose mothers were recruited from the general population during pregnancy. In this study population the prevalence of “asthma symptoms” was 14% at the age of 8 years.

In both studies an association was observed between being overweight (“high BMI” in the PIAMA study and “overweight” based on weight-for-height in the Finnish study) and having bronchial hyperresponsiveness (assessed by means of exercise challenge in Hyvärinen et al¹ and by means of methacholine challenge in the PIAMA study). In our study the association was statistically significant. In Hyvärinen et al’s study it was not.

Hyvärinen et al¹ report that they observed no association between overweight status and doctor-diagnosed asthma or use of asthma medication.

The sample size of the study by Hyvärinen et al¹ is relatively small, which limits the possibility to adjust for confounders and limits the power to detect true associations. Furthermore, we speculate that in this selected high-risk population with such a high asthma prevalence, being overweight might contribute only marginally to the asthma risk.

We were pleased to see that Hyvärinen et al¹ did not question the validity of our results based on methodology or interpretation. Therefore, we hope for future studies to shed more light on this issue.

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