

Correspondence

Reply

To the Editor:

We thank Akelma et al¹ for their valuable comments regarding our article.² The authors touch upon 3 vitally important and intertwined matters that require further elucidation. Our understanding of the causal interactions leading to atopic sensitization and clinical disease is by no means satisfactory. These shortcomings continue to be reflected in the nomenclature of atopic disease. Last, we need to reach clarity on what may be considered to constitute a preventive effect.

The complex causal interactions between allergen exposure, sensitization, and clinical hypersensitivity remain elusive. Transient asymptomatic antigen-specific IgE sensitization is common in infants and may be encountered in up to 80% of children during the first 5 years of life³ while concomitantly exposure to allergens sensitizing the host immune system may not necessarily induce clinical disease.⁴ As Akelma et al¹ allude, infants with eczema have compromised skin and gut barriers that may function as portals for sensitization to environmental and dietary allergens. Little progress in elucidating these matters has been made since we last discussed them in detail⁵ and therefore, as of present, we do not wish to argue as to which is the hen and which is the egg in the development of atopic disease.

We hope that these questions attract scientific interest and validated diagnostic and prognostic markers will be available for future clinical research. Meanwhile, we strongly believe that a rigorously defined study population and clear-cut clinical diagnostic criteria together with sufficient duration of follow-up remain the cornerstones for reliability, reproducibility, and clinical relevance in clinical trials aiming to reduce eczema risk. The diagnosis of eczema should, in our opinion, always be based on serial clinical assessment by a physician and not on questionnaires or parental reports alone. In a similar fashion, the probiotic intervention should be described comprehensively including strains, their identity and culture collection deposit numbers, dose, duration, matrix, and viability to render the trial reproducible.

We strongly agree with Akelma et al on the importance of a sufficient follow-up period. Currently, there are no recommendations concerning proper follow-up time in the primary prevention of atopic disease but the highest incidence of eczema occurs

during the first 2 years of life. In the previous probiotic intervention studies within our research program, follow-up periods of a minimum of 4 years and up to 14 years have been reached. We and recently others have shown that the beneficial effects of early probiotic intervention aiming to reduce eczema risk achieved during the first 2 years of life persist later in childhood.^{6,7} We therefore believe that our results reflect a true preventive effect. While we are awaiting a more thorough understanding of the disease entities at hand and, as a consequence, better diagnostic and prognostic markers, clinical follow-up of the present population continues and the same is recommended to other research groups active in trials aiming to reduce the burden of atopic disease.

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