

CORRESPONDENCE

Breast feeding and immunomodulation

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To the Editor,

It is with great interest that we read the report by San Feliciano et al. demonstrating that duration of breast feeding is inversely associated with the production of RANTES, VEGF and IL-10 in the upper respiratory tract, potentially offering a mechanism by which breastfeeding protects against wheezing during infancy (1). Together with our own findings (2), this indicates that breast feeding significantly impacts on early life immune development. We recently showed the relevance of early life immune development for eczema development (3). However, as often in research, this also raises new questions. Do the observed patterns of cytokine production in breastfed children indeed protect against subsequent asthma? And, if so, what is the optimal duration of breastfeeding? When is it safe to introduce formula feeding?

Perhaps, the most intriguing question is which factor(s) in breast milk mediate this effect. In westernized countries, 94%

of women initiate breastfeeding, while only 46% maintain breastfeeding for >6 months (4). Identification of the immune modulatory factors in breast milk might enable us to use these as nutritional supplements or to add them to infant formula feeds. Our study and the study by San Feliciano et al. (1,2) are the first steps to understand how early life nutrition might be used to modulate immune development in order to prevent subsequent allergic disease.

M. Belderbos¹ & L. Bont²

¹Department of Pediatrics, University Medical Center Groningen, Groningen, The Netherlands; ²Department of Pediatrics, University Medical Center Utrecht, Utrecht, The Netherlands.

E-mail: m.belderbos@umcutrecht.nl

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