Prolonged breastfeeding does not protect against eczema

The largest worldwide study on the association between breastfeeding, time of weaning and eczema in children has concluded that there is no clear evidence that exclusive breastfeeding for four months or longer protects against childhood eczema, according to research due to be published in the British Journal of Dermatology on August 24 2011.  
  
The researchers, based at The University of Nottingham, King’s College London and the University of Ulm, Germany, looked at data from 51,119 children aged eight to 12, from 21 countries, as part of Phase Two of The International Study of Asthma and Allergies in Childhood (ISAAC)\*, the largest epidemiological research project ever undertaken.

Their findings have prompted them to call for a review of the current UK breastfeeding guidelines with regard to eczema.  
  
Hywel Williams, Professor of Dermato-Epidemiology and Director of the Centre for Evidence Based Dermatology at The University of Nottingham, said: “There is no doubt that breast is best in terms of prevention of infections and parental bonding, but mothers who cannot breastfeed should not feel guilty if their child develops eczema.

The evidence that prolonged and exclusive breastfeeding protects against eczema is not convincing.”

Information on eczema, breastfeeding and time of weaning was gathered by parental questionnaire.

Children also underwent a skin examination for eczema and skin prick testing to environmental allergens, including house dust mite.  
  
Earlier studies have suggested a protective effect of breastfeeding on childhood eczema, and the UK Department of Health currently recommends exclusive breastfeeding for six months to prevent eczema, in line with the World Health Organisation.

However, a review of the more recent literature found no evidence for a protective effect of exclusive breastfeeding for three months or longer on eczema development, in keeping with the findings from this study.

The authors also point out that there is mounting evidence to suggest that the early introduction of potentially allergenic food proteins, such as peanut, could increase tolerance to these foods, rather than causing allergy, although this remains to be confirmed in intervention studies.  
  
This worldwide study therefore sought to investigate to what extent exclusive breastfeeding protects against childhood eczema.

It concluded that children who were exclusively breastfed for four months or longer were as likely to develop eczema as children who were weaned earlier.  
  
Dr Carsten Flohr, who began this research while at The University of Nottingham and is now based at King’s College London, said: “Although there was a small protective effect of breastfeeding per se on severe eczema in affluent countries, we found no evidence that exclusive breastfeeding for four months or longer protects against eczema in either developed or developing nations.

We feel that the UK breastfeeding guidelines with regard to eczema should therefore be reviewed.

Further studies are now required to explore how and when solids should be introduced alongside breastfeeding to aid protection against eczema and other allergic diseases.”  
  
Dr Flohr is keen to emphasise that other benefits of breastfeeding on infant health, unrelated to eczema, are not being disputed.

He explained: “It is widely accepted that breast milk is the most important and appropriate nutrition in early life.

Especially in the context of developing countries it is also important to keep in mind that exclusive breastfeeding reduces the risk of gastrointestinal infections compared to mixed or bottle feeding.

Our study does not change this notion.”  
  
Nina Goad of the British Association of Dermatologists said: “The size of this study means that its findings are very significant, although the authors recognise that further studies are required.

Following these further studies we may need to review the UK’s advice on how long mothers should breastfeed exclusively for, and at what age we should be weaning our infants, in relation to eczema prevention.  
  
“This study isn’t about the benefits of infant formula milk versus breast milk, nor is it questioning other benefits of breast feeding, but it is about whether breastfeeding exclusively for prolonged periods and weaning after six months, as opposed to after four months, has any impact on eczema risk.”  
  
  
**Background information**  
  
The definitive study design to explore how and when solid foods should be introduced alongside breastfeeding to optimally protect against allergic disease is a randomised controlled trial. Such a trial is currently being conducted at the Children’s Allergies Department at St. Thomas’ Hospital (‘Enquiring About Tolerance’ (EAT) Study; www.eatstudy.co.uk).  
  
The Scientific Advisory Committee on Nutrition (SACN) is currently undertaking a review of the scientific evidence underpinning the United Kingdom infant and young child feeding policy, stating that since the Committee on Medical Aspects of Food Policy (COMA) published its report ‘Weaning and the weaning diet’ in 1994, there has not been a thorough risk assessment of such evidence in the UK. ([www.sacn.gov.uk](http://www.sacn.gov.uk))  
  
\*ISAAC, The International Study of Asthma and Allergies in Childhood, is a unique worldwide epidemiological research programme established in 1991 to investigate asthma, rhinitis and eczema in children due to considerable concern that these conditions were increasing in western and developing countries. ISAAC has become the largest worldwide collaborative research project ever undertaken, involving more than 100 countries and nearly two million children. Its main aim is to develop environmental measures and disease monitoring in order to form the basis for future interventions to reduce the burden of allergic diseases, especially in children in developing countries.  
  
Articles in the BJD can be viewed online: [www.brjdermatol.org](http://www.brjdermatol.org)

**Notes to editors:**

The **British Association of Dermatologists** is the central association of practising UK dermatologists. Our aim is to continually improve the treatment and understanding of skin disease. For more information go to [www.bad.org.uk](http://www.bad.org.uk)  
  
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