

Elizabeth A Miles

Developmental Origins of Health and Disease, School of Medicine, University of Southampton, IDS Building, MP 887, Southampton General Hospital, Tremona Road, Southampton, SO16 6YD, UK
Telephone: + 44 (0) 2380 796925 Fax : +44 (0) 2380 795255

eam@southampton.ac.uk

Research Interest

I am a nutritional immunologist researching the effects of nutrients (particularly n-3 fatty acids) on the immune response. My early research concentrated on the developmental origins of atopic disease. I demonstrated that at birth the immune responses of babies who subsequently developed allergic symptoms were different from babies who did not. Subsequently I studied the effects of nutrients on the immune system and particularly the effects of n-3 and n-6 polyunsaturated fatty acids. I have shown that in healthy humans, supplementation with fish oil results in a dose-dependent increase in n-3 fatty acids in plasma and immune cells and decreases in vitro immune cell inflammatory prostaglandin E2 production (Miles 2006, Rees 2006). Currently I am investigating the effect of increasing the dietary intake of n-3 fatty acids in pregnancy on markers of atopy in the offspring in families with an increased risk of atopic disease. This combines my interest in n-3 fatty acids and immune function with a longstanding interest in the early life origins of atopy. It is the first study in which pregnant women have had their diet supplemented with oily fish (salmon) and atopic outcome of the infant investigated. This research is ongoing but early results are encouraging.

Education

1995, PhD, Pediatric allergy and immunology, Department of Child Health, University of Southampton, UK.

1987, BSc (hons), Microbiology with genetics, Queen Mary College, University of London, UK.

Employment history

2000-2010	Senior Research Fellow, Institute of Human Nutrition, Developmental Origins of Health and Disease Division, University of Southampton.
1999- 2000	Research Fellow, Institute of Human Nutrition, University of Southampton.
1996-1999	Post-doctoral Research Assistant, Institute of Human Nutrition, University of Southampton.
1995-1996	Post-doctoral Research Assistant, Child Health, University of Southampton.
1991-1995	Research Assistant and part-time PhD student, Child Health, University of Southampton.
1988-1991	Research Assistant, Dept of Veterinary Pathology, Royal Veterinary College, London.

Publications

h-index of 25, 42 peer reviewed research papers, 8 review articles

Society memberships

Developmental Origins of Health and Disease Society, The British Society for Allergy and Clinical Immunology, The Nutrition Society, International Society for the Study of Fatty Acids and Lipids.