

# Trends of peanut allergy incidence in England using sequential childhood cohorts

Area of research interest: [Food hypersensitivity](#)

Study duration: 2003-04-01

Planned completion: 1 March 2006

Project code: T07034

Conducted by: St Mary's Hospital, Isle of Wight

## Background

In the light of Department of Health's 1998 COT report on peanut allergy, there was a need to establish whether the advice for atopic mothers to avoid peanuts during pregnancy and lactation has had any effect on the incidence of peanut allergy. In addition, there was a requirement to establish what impact, if any, this advice has had on the maternal consumption of peanut during pregnancy and breastfeeding.

## Research Approach

The study involved a whole population prospective birth cohort consisting of over 1,000 mothers recruited from the Isle of Wight in 2001/2002 (after the COT advice). Food frequency questionnaires were used to monitor what mothers ate during pregnancy and while breast-feeding and in-depth interviews were conducted to identify which mothers had avoided peanuts during pregnancy. Children were followed until three years of age and tested yearly for peanut sensitisation.

## Results

65% of mothers questioned reported that they had avoided eating peanuts when they were pregnant. Half of the 42% of mothers who recalled hearing the COT advice had modified their diets as a result of the advice. The researchers found that the atopic history of the mother or immediate family had no effect on whether the COT advice was heard or adopted. Parity was found to play a role in peanut avoidance, with mothers who were having their first child being twice as likely to avoid peanuts or reduce their consumption during pregnancy.

Prevalence of peanut sensitisation was reported to increase with age, being 0.4% at 1 year, 1.9% at 2 years and 2% at 3 years. Sensitisation to peanut was not associated with maternal peanut consumption/avoidance behaviour during pregnancy. The authors compared their data to that from a previous cohort born in the same geographical area between 1994-1996 (before the COT report) and found that the rates are similar (1% versus 1.5%) . They therefore concluded that the prevalence of peanut allergy has not changed significantly since the COT advice was issued in 1998. However, this study was unable to definitively conclude, what the impact of the Government advice on peanut consumption has been on the prevalence of peanut allergy in British children (whether it has been positive or negative).

## Published Papers

1. Grundy, J et al. (2002) Rising Prevalence of allergy to peanut in children: Data from 2 sequential cohorts. *Journal of Allergy and Clinical Immunology*. 110: 784-789.

## Research report

### England, Northern Ireland and Wales

PDF

[View An Investigation into Trends of Peanut Allergy Incidence in the Last 15 Years in England Using Sequential Childhood Cohorts as PDF\(Open in a new window\)](#) (431.25 KB)

### England, Northern Ireland and Wales

PDF

[View Appendix 1: recruitment questionnaire as PDF\(Open in a new window\)](#) (101.63 KB)

### England, Northern Ireland and Wales

PDF

[View Appendix 2: food frequency questionnaire as PDF\(Open in a new window\)](#) (110.87 KB)

### England, Northern Ireland and Wales

PDF

[View Appendix 3: 3-month questionnaire as PDF\(Open in a new window\)](#) (101.59 KB)

### England, Northern Ireland and Wales

PDF

[View Appendix 3a: 3-month \(breastfeeding only\) questionnaire as PDF\(Open in a new window\)](#) (64.45 KB)

### England, Northern Ireland and Wales

PDF

[View Appendix 3b: 3-month \(formula feeding only\) questionnaire as PDF\(Open in a new window\)](#) (77.12 KB)

### England, Northern Ireland and Wales

PDF

[View Appendix 3c: 3-month \(formula and breastfeeding\) questionnaire as PDF\(Open in a new window\)](#) (78.48 KB)

### England, Northern Ireland and Wales

PDF

[View Appendix 4: 6-month questionnaire as PDF\(Open in a new window\)](#) (114.82 KB)

### England, Northern Ireland and Wales

PDF

[View Appendix 5: 9-month questionnaire as PDF\(Open in a new window\)](#) (188.55 KB)