

PIFA: Revisiting the UK EuroPrevall cohort

Research programme [Food allergy and intolerance research --](#)
Study duration July 2014 to March 2017
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Conducted by University of Southampton

Background

Food allergy and other allergic diseases such as asthma, hay fever and eczema, affect about a third of children in the UK. At present, there is no cure for these conditions and so it is important to develop prevention strategies.

The EuroPrevall project was a large-scale EU FP6 funded multicentre study focusing on the prevalence and burden of food allergy across Europe. The UK EuroPrevall birth cohort was recruited as part of this project in 2005-7.

In parallel with birth cohorts in 8 other European countries, 1140 infants were followed until 2 years of age, with suspected food allergy being assessed by the gold standard double-blind, placebo-controlled food challenge (DBPCFC). Only the UK cohort provided detailed infant food diaries which have enabled researchers to answer questions about how the early diet, particularly dietary patterns, impacts on the development of allergic diseases. However, manifestations of food allergy and other related allergic diseases radically change throughout childhood necessitating further assessment of this cohort.

Through revisiting the UK EuroPrevall cohort at 8-9 years researchers will be able to build upon the information which was gathered previously.

This follow up project will allow us to gain an understanding into how older children are affected by food allergy and to investigate whether there is a link between early life nutrition and the development of allergic diseases (including asthma and eczema) in later life. The results of the follow up study may enable us to develop strategies to prevent the development of allergies and asthma in the future.

Research Approach

This current follow up project is set within the [EU FP7 iFAAM project](#) (Integrated Approaches to Food Allergen & Allergy Risk Management). iFAAM aims to reassess the whole European birth cohort (n~12000) at 8-9 years of age focusing on food allergy (defined by DBPCFC) and asthma. These data will be used to describe the natural history and risk factors for food allergy and asthma, gain an understanding of how older children are affected by food allergy, and to assess the impact of early diet on the development of allergic disease in school aged children.

The research approach involved sending an introductory letter to all participants by post providing an update about the related PIFA study and information on the iFAAM project explaining how they could participate in the follow-up study by completing the online questionnaire on food allergy and asthma. Parents of participants were also contacted by phone where possible and invited to participate in the study.

A face-to-face assessment was then undertaken. This allowed the assessment of weight, height, blood pressure and eczema status. Skin prick testing and a blood test were undertaken where participants gave consent to assess allergy status.

Participants with possible food allergy/allergies identified during the face-to-face visit were then invited for a Double Blind Placebo Control Food Challenge (DBPCFC). The protocol for this was broadly similar to that of EuroPrevall where it consisted of an active and a placebo day which were in a random order. Challenge data were then recorded directly into the online database.

This approach allowed the researchers to determine the current prevalence of food allergies and asthma, whether the children presenting with food allergies previously still currently had allergies or if they have grown out of them, and what the risk factors could potentially be for developing some allergic diseases.