

Characteristics of kiwi fruit allergy

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

Study duration: 2003-01-01

Project code: T07038

Conducted by: University of Southampton

Background

Allergy to kiwi fruit initially presented in the UK population in adults as a cross-reaction to latex or birch pollen.

After some 20 years in the UK diet, allergy started to present in early childhood, often on the first known exposure. The paediatric at-risk group is highly atopic and the symptoms of kiwi allergy can be severe. The differences between adults and children are thought to occur either because of the timing of exposure, or because they are reacting to different allergens.

Kiwi fruit has been a common component of the UK diet for only 20 years and therefore serves as a model for how allergy develops in a population when a new food is introduced.

Research Approach

This research will use a combination of questionnaires and biochemical techniques in order to assess the clinical symptoms associated with kiwi allergy. Two dimensional-polyacrylamide gel electrophoresis (2D-PAGE) will provide a more complete picture of the allergens present and proteins, separated by 2D-PAGE, will be analysed by peptide mass fingerprinting.

The questionnaire, based on previous designs used to characterise peanut allergy, will consist predominantly of closed questions. They will provide clinical information about the different ways the allergy presents in different groups of subjects, and will complement the laboratory studies which will explain these differences.

Results

The results of this study confirmed that kiwi fruit should be considered a significant food allergen, capable of causing severe, life-threatening reactions. Young children and infants with kiwi fruit allergy usually reacted the first time that they ate the fruit and reactions were often severe. Although some adults also have severe reactions, they were more likely to have milder symptoms. We demonstrated that the methods currently used to detect food allergy are not always accurate. Attempts were made to improve the accuracy of tests, but further work is required.

Research report

England, Northern Ireland and Wales

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