

Hydrolysed Formula and Risk of Allergic or Autoimmune Outcomes - a systematic review and meta-analysis

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

Study duration: 2013-03-01

Planned completion: 20 August 2015

Project code: FS305005

Conducted by: Imperial College

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Background

Atopic conditions, including asthma, eczema, rhinoconjunctivitis and food allergy, appear to have increased in prevalence in recent decades in many countries, and are some of the commonest causes of chronic illness in children and young adults living in the UK. An apparent increase in disease prevalence, combined with data from migration studies, suggests that early-life environmental factors may be important modulators of atopic disease risk. Similarly, the autoimmune diseases type I diabetes mellitus (T1DM) and Crohn's disease also appear to have increased in prevalence in some countries.

There has been some interest in the potential for hydrolysed cows' milk formula to influence the risk of atopic or autoimmune disease. In response, we commissioned a systematic review of the published scientific literature on infant formula containing hydrolysed cows' milk protein and their potential role in reducing the risk of infants and young children developing atopic outcomes and autoimmune disease.

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Research Approach

The key objective of this work was to undertake a systematic review of the published literature to investigate whether the use of hydrolysed cow's milk-based infant formula influences the development of atopic outcomes and autoimmune disease.

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Results

Following their comprehensive review of the literature, the contractors identified a number of key findings:

- The overall risk of bias was high or unclear in almost all of the studies identified. There was evidence of publication bias in some of the analyses of allergic outcomes
- There was no evidence that hydrolysed infant formula prevents allergic outcomes or type I diabetes mellitus
- No studies were identified on other autoimmune diseases

Research report

England, Northern Ireland and Wales

PDF

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