

Eczema can be a complicated condition to manage and often parents worry that food allergy might be causing it, so seek allergy tests. It is not clear whether allergy tests are helpful for children with eczema or if they result in unnecessary exclusion diets and/or distract from essential treatment. Patients and doctors agree that the problem is a research priority and both parents and GPs who were invited to take part in our study thought it was necessary.

TEST was a feasibility study looking to see whether routine allergy tests and exclusion diets are helpful for children with eczema. Now the study has finished, we are pleased to share what the study found. We chose to do a feasibility study so we could test how a large clinical trial might work. Therefore, the purpose of our study was not to demonstrate whether food allergy test-guided dietary management reduces eczema severity, but to determine whether parents and children were happy to take part in a study of this sort.

We sent invitations to parents of children with eczema via 17 GP practices in and around Bristol. In total, 84 children, aged 6 months – 5 years, with mild to severe eczema took part. The average age of the children was older than anticipated (~32 months).

At their first appointment, the children were randomly allocated to either usual care (42, 50%) or intervention (42, 50%), which involved being asked extra questions and having a skin prick test of six common allergy causing foods (cow's milk, hen's egg, cashew, wheat, codfish and peanut).

Most participants in the intervention group (36/42, 85.7%) reported no allergy symptoms to specific foods and had negative skin prick tests. Although this was reassuring to some parents, other parents were left feeling frustrated, still not knowing what was causing the eczema or how best to manage it.

Of the six participants who had positive skin prick tests, egg was positive in four cases, peanut in three cases and milk in three cases. Advice was given to exclude and then reintroduce one or more of the foods at home and/or to attend allergy clinic for further tests. Participants were also referred to a dietician for support with following an exclusion diet.

At six months, all the children were visited at home to have their skin reassessed. Only four participants withdrew during this time. Parents completed their monthly diaries well, with many finding it a useful aid to monitor their child's eczema. However, for some it was burdensome, suggesting a lighter touch may be needed for any future trial.

We are not able to determine from this feasibility study whether allergy testing and exclusion diets are helpful for children with eczema. However, what we have learned, from the study process and from capturing what parents and GPs think, is valuable for our application to fund a clinical trial to enable us to answer that question. For more information about the study and our future plans, see www.bristol.ac.uk/eczema-allergy-study, follow us on Twitter (@eczema_allergy) or email test-study@bristol.ac.uk.