Psychological impact of open food challenges in adults
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Aims: Despite food challenge testing being the gold standard for food allergy diagnosis, there is only minimal research published on its psychological impact and effect on health related quality of life (HRQoL) in adults. The aims of this study were to assess whether undergoing a clinically indicated open food challenge affects the quality of life of adults with suspected food allergy and whether HRQoL gains are higher among people testing negative than those testing positive for food allergy. In addition, we aimed to evaluate whether undergoing a food challenge test leads to a reduction in anxiety.

Methods: A prospective cohort study involving completion of a survey prior to the challenge test, on the day, and three months after the test was conducted. The inclusion criteria were: age 18 or older and a clinical decision that a food challenge was indicated. The Food Allergy Quality of Life Questionnaire-Adult Form (FAQLQ-AF) was used to assess change in HRQoL before and after the challenge. State anxiety was assessed with the 6-item version of the Spielberger State Trait Anxiety Inventory.

Results: 53 individuals were included. The mean age was 33.5 years (SD=12.5). The majority were female (71.7%). A variety of foods were tested with the most common being tree nuts, peanut, shellfish and fish. Most participants tested negative on challenge (84.9%).
There was a significant improvement in HRQoL three months post-challenge compared to baseline, F (1,52) = 15.346; p<0.001 and this was unrelated to challenge outcome.
A significant reduction in state anxiety was observed following the food challenge, F (2,104) = 15.75; p<0.001.

Discussion: Undergoing a food challenge test leads to improvement in HRQoL of adults with suspected food allergy despite whether they test positive or negative.

Conclusion: By making these tests more widely available in clinical practice and clarifying whether an individual is allergic or not, any uncertainty can be dispelled, unnecessary food restrictions can be avoided, HRQoL can be improved and anxiety reduced.