the results of this study support that tolerance of baked egg may help to promote tolerance of concentrated egg. Patients should be evaluated by an allergist early to possibly allow for introduction of baked egg into the diet. If baked egg tolerance has been established, the pediatrician can encourage parents to continue it in the diet. Further studies are needed to determine if the same benefit may be seen with cow's milk and identify markers for favorable food challenge outcome.

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Oral Food Challenge Failures Among Foods Restricted Because of Atopic Dermatitis

Eapen AA, Kloepfer KM, Leickly FE, Slaven JE, Vitalpur G. *Ann Allergy Asthma Immunol*. 2019;122(2):193–197

PURPOSE OF THE STUDY: To evaluate the frequency of office-based oral food challenge (OFC) failures to previously tolerated foods eliminated from diets to treat atopic dermatitis (AD) based on positive skin prick test (SPT) results and/or specific immunoglobulin E (sIgE) testing.

STUDY POPULATION: A total of 442 patients were included who had undergone OFCs to peanut, wheat, soy, milk, and egg (the top 5 allergens in the United States) at the allergy clinics of Riley Hospital for Children at Indiana University Health from 2008 to 2014.

METHODS: By retrospective chart review, subjects were classified into 3 groups according to the reason for food avoidance, as follows: food allergy (defined as typical signs of an allergic reaction within 2 hours of ingestion, with supporting SPT or sIgE results), sensitization without introduction (food item never introduced because of positive SPT and/or sIgE results found during evaluation for AD or other food allergies), and avoidance based on positive SPT and/or sIgE test results found during AD workup (all had previously tolerated the food without reaction within 2 hours). OFCs were offered if the subject had sIgE levels predicting passing the OFC on the basis of 95% positive predictive values and no reaction to the food in the last 12 months. Plain and extensively heated milk OFCs were grouped together, as were those for egg. Extensively heated food challenges were offered regardless of sIgE levels. Total IgE levels were not reported.

RESULTS: Indications for OFCs were a history of food allergy (320 of 442, 72.4%) and sensitization (77 of 442, 17.4%) and AD (45 of 442, 10.2%). There were no significant differences among these 3 groups at OFC in age, sex, race, asthma, allergic rhinitis, or percentage of positive SPT results to the food. The overall OFC failure rate was 20.1%, including 21.9% of the food allergy group, 16.9% of the sensitization group, and 13.3% of the AD group, which was not statistically significant comparing groups ($P = .30$). There was no significant difference with regard to OFC pass and fail rates among the 5 foods challenged or the length of time of food avoidance (range: 3–120 months, $P = .97$). Wheat was significantly more likely to be avoided because of AD ($P < .001$), and milk was likely to be avoided because of food allergy ($P = .002$).

CONCLUSIONS: In this study, 13.3% of children with AD who had removed a previously tolerated food from their diet because of a positive SPT and/or sIgE test result failed an OFC to that food in as quickly as after 3 months of avoidance. This demonstrates the potentially rapid loss of tolerance that can occur with food elimination for AD therapy and bolsters evidence that SPT and/or sIgE test results in patients with AD who do not have a history of immediate reaction to the foods tested are often clinically irrelevant.

REVIEWER COMMENTS: Data on the role of food triggers in AD have been conflicting, but overall there is lack of high-quality evidence. Aggressive skin care regimens should be pursued over elimination diets, which carry the risk of loss of tolerance to a food previously consumed without immediate reaction.

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Long–term Follow–up After Baked Milk Introduction

Dunlop JH, Keet CA, Mudd K, Wood RA. *J Allergy Clin Immunol Pract*. 2018;6(5):1699–1704

PURPOSE OF THE STUDY: Introduction of baked milk (BM) to children with milk allergy is associated with accelerated resolution of milk allergy. This study was designed to characterize the clinical experience of one center with the introduction of BM and other forms of milk after challenge, including the relations of prechallenge and in-challenge characteristics with future successful milk introduction, as well as safety.

STUDY POPULATION: The population included 206 children with milk allergy who had undergone a BM challenge in this center from 2009 to 2014 and who had at least 24 months of follow-up.

METHODS: Methods included retrospective chart review or telephone follow-up. Protocol includes an advancement in dose as tolerated over time if the starting dose is <2 g of BM. After consuming 2 g of BM 3 to 5 times per week for 2 to 3 months, patients are permitted to advance their milk ingestion to less-heated forms of milk (such as pancakes and waffles), then oven-baked cheese, then uncooked dairy products, as tolerated.

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