

Correspondence

Reply

To the Editor:

We thank Drs Liccardi and D'Amato¹ for their kind comments and interest in our study, which was designed to evaluate the time course of peanut allergen persistence in saliva and to determine the effectiveness of simple mouth-cleaning measures for the removal of peanut protein following peanut butter ingestion.² However, their suggestions to include numerous saliva collections and the use of water to enhance recovery of peanut would have diluted samples and disrupted the very aim of our study: to survey residual peanut protein in the saliva in order to provide practical advice. Their suggestions are likely based upon the assumption that peanut protein may be resecreted into saliva following ingestion. However, our study design captured the more likely relevant exposure: specifically, from residual peanut in the mouth following a peanut-containing meal. We, therefore, tracked Ara h 1 at 5 time points, including those beyond when Ara h 1 was no longer detectable. Resecretion of allergens into saliva is a possibility that we addressed in the discussion of our article. Two subjects in the time-course experiments had undetectable levels of Ara h 1 at an early time point, with reappearance later. Resecretion may have accounted for these findings; however, regardless of the mechanism, the amounts of Ara h 1 measured after initial disappearance, as a marker of total peanut protein, were over 100-fold below concentrations reported to elicit objective symptoms in those with peanut allergy, indicating that resecretion is an unlikely trigger of an allergic response compared to residual protein in the oral cavity.³⁻⁵

We focused on food exposure from kissing (exposure to saliva) and did not comment on other allergens, namely drugs, which could also pose a threat through transfer in saliva. We thank Drs Liccardi and D'Amato for bringing attention to this additional exposure risk which they and others have reported.

Nolan et al⁶ confirm our observations about peanut allergen being detected in saliva and theorize that peanut-laden saliva may be a sensitizing exposure for infants

being kissed. This is an interesting hypothesis that could be extended to any food and to countless other nonoral exposures for an infant. We presume that parents have kissed their children for decades prior to the atopic disease epidemic and hope that they will not become reluctant to continue to do so. However, we acknowledge that more studies will be needed to further elucidate the relative roles of various exposures and exposure routes in eliciting or preventing food allergy.⁷

Jennifer M. Maloney, MD
Scott H. Sicherer, MD

From the Department of Pediatrics, Division of Allergy and Immunology, Elliot and Roslyn Jaffe Food Allergy Institute, Mount Sinai School of Medicine, New York, New York. E-mail: scott.sicherer@mssm.edu.

Disclosure of potential conflict of interest: The authors have declared that they have no conflict of interest.

REFERENCES

1. Liccardi G, D'Amato G. Drugs may also induce allergic reactions in sensitized individuals through passionate kissing. *J Allergy Clin Immunol* 2007;■■■■:■■■-■■■.
2. Maloney JM, Chapman MD, Sicherer SH. Peanut allergen exposure through saliva: assessment and interventions to reduce exposure. *J Allergy Clin Immunol* 2006;118:719-24.
3. Hourihane JO, Kilburn SA, Nordlee JA, Hefle SL, Taylor SL, Warner JO. An evaluation of the sensitivity of subjects with peanut allergy to very low doses of peanut protein: a randomized, double-blind, placebo-controlled food challenge study. *J Allergy Clin Immunol* 1997;100:596-600.
4. Wensing M, Penninks AH, Hefle SL, Koppelman SJ, Bruijnzeel-Koomen CA, Knulst AC. The distribution of individual threshold doses eliciting allergic reactions in a population with peanut allergy. *J Allergy Clin Immunol* 2002;110:915-20.
5. Flinterman AE, Pasmans SG, Hoekstra MO, Meijer Y, van Hoffen E, Knol EF, et al. Determination of no-observed-adverse-effect levels and eliciting doses in a representative group of peanut-sensitized children. *J Allergy Clin Immunol* 2006;117:448-54.
6. Nolan RC, de Leon MA, Rolland JM, Loh RKS, O'Hehir RE. What's in a kiss: peanut allergen transmission as a sensitizer? *J Allergy Clin Immunol* 2006; Dec 12 [Epub ahead of print].
7. Sicherer SH, Bock SA. An expanding evidence base provides food for thought to avoid indigestion in managing difficult dilemmas in food allergy. *J Allergy Clin Immunol* 2006;117:1419-22.

doi:10.1016/j.jaci.2006.12.656