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## Oral immunotherapy in US allergy practice



To the Editor:

We read with interest the American Academy of Allergy, Asthma & Immunology (AAAAI) oral immunotherapy (OIT) survey report of Anagnostou and Vickery. The Food Allergy Support Team (FAST), a group of allergists dedicated to enhancing food OIT, surveyed members of the Google Group, OITAdvisors, comprising 550 board-certified allergist/immunologists and their staffs, during the Spring of 2023. Representatives of 129 private allergy practices responded. A total of 97.5% had treated ≥1 patient; collectively, >26,000 patients had been treated (Figure 1). Specific foods treated include peanut (100%), tree nuts (86%), cow milk (80%), egg (79%), seeds

(69%), wheat (56%), and legumes (39%) with fewer than 10% treating fish or shellfish allergy. Most practices (73%) treat patients <36 months of age, and 22% treat patients younger than 9 months.

The FAST survey focused on the details of food allergy treatment practices and found that 88% of practices initiate dosing using a standard dose, whereas the remainder begin OIT with a challenge. Biweekly dosing is most common (61%), whereas 31% updose weekly. Most respondents use retail food for peanut OIT, with 4.5% using the Food and Drug Administration–approved product in <5% of patients. An initial dose of <1.0 mg of peanut protein (PP) is used by 78% of practices, whereas 25% begin with <0.01 mg of PP. A final dayone dose of <5 mg is used by 81% of practices. Escalation target doses ranged from 250 mg of PP to >2000 mg of PP. Among the 100 practices that treat tree nuts and seeds, 54 use protocols specific for each food, whereas the remainder use a dosing schedule based on their peanut schedule. A total of 63 of 87 respondents who treat milk allergy use a maintenance dose of ≥90 mL. Similarly, 82 of 89 practices treating egg allergy use a maintenance dose of ≥1800 mg of egg white protein (1/2 of a large egg).

A minority of practices (18%) perform remission challenges. An equal number report discussing such challenges with patients, but all their patients have declined. More than 60% of clinics are either offering food sublingual immunotherapy or intend to do so in the next 6 months.

Although the AAAAI survey provided interesting and useful information relating to the general OIT experience of members, the survey reported herein demonstrates the breadth of food OIT that has been implemented by board-certified allergist/immunologists with more than 26,000 patients having undergone treatment. These physicians have adapted published protocols and shared their experience<sup>2,3</sup> to expand the knowledge base of this novel form of therapy and implement it in routine clinical practice. There are OIT-related questions that are unlikely to be answered by prospective, controlled trials. Nevertheless, practitioners are forced to answer these questions every day. Collaborative exchanges such as OITAdvisors, FAST annual meetings,<sup>2,3</sup> and periodic surveys can address these questions for the benefit of patients with food allergy.

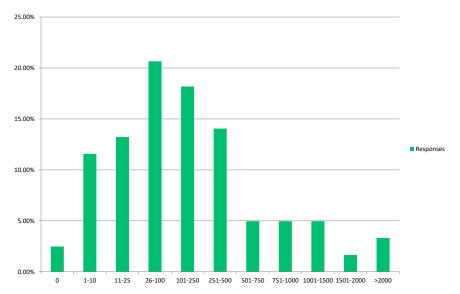
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**FIGURE 1.** Estimated number of patients who have been treated with food oral immunotherapy. The *X*-axis represents the estimated number of patients treated by each practice. The *Y*-axis is the percentage of responding practices. A total of 129 allergy practices responded to the survey.

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## Reply to "Oral immunotherapy in US allergy practice"



To the Editor:

Wasserman et al<sup>1</sup> describe a survey from 129 private practices performing oral immunotherapy (OIT) in their recent communication, adding to data from the American Academy of Allergy, Asthma & Immunology (AAAAI) survey on OIT practices in the United States.<sup>2</sup> An important issue that has come up in both surveys and appears to be remarkably consistent across the board, relates to the small percentage of health care providers regularly performing oral food challenges (OFCs) before starting OIT (12% in both surveys) and after reaching maintenance (18% in the Wasserman et al reported survey). <sup>1,2</sup> The role of these challenges needs to be examined more closely.

For baseline OFCs, in the context of food OIT, the 2 main benefits for patients and families include: (1) confirming the diagnosis (especially in cases where there is doubt; eg, the patient has avoided the food for many years due to previous positive testing, but there has been no documented clinical reaction to the food) and (2) identifying the patient's individual threshold of reactivity. This may allow us to commence OIT at a higher initial dose level, thus lessening the duration of the process (shorter dose escalation period) and also the number of clinic visits and the

overall cost of therapy. Other, secondary benefits, can include an improvement in quality of life after the OFC and a better understanding of allergic reaction management, with potentially less fear in using epinephrine.<sup>3</sup> These benefits will need to be balanced out with the risks associated with performing an OFC, including the possibility of a severe allergic reaction, the significant time commitment required, the potential inconvenience for the family (ie, time off work for parents), and the cost of the procedure. It has been shown, however, that the number of allergists who are willing to perform in-office OFCs has increased over time, despite multiple perceived barriers.<sup>4</sup>

Remission OFCs have a different place in the OIT process. They evaluate the ability of patients who have reached maintenance to discontinue therapy for variable amounts of time, without a negative effect on desensitization. It is likely that the response will be different in each food-allergic individual, with some losing their clinical tolerance (ability to tolerate the ingestion of a specific amount of the allergenic food), some partially losing their clinical tolerance and some not being affected at all (Figure 1). <sup>5,6</sup> There is no universal agreement on how long the therapy should be discontinued for, to assess remission; studies have evaluated timelines between 1 week and multiple months off treatment with inconsistent results. <sup>5,6</sup>

In summary, OFCs are key players in food immunotherapy with multiple benefits, as well as some associated risks. Both should be presented and discussed with patients and their families, ideally as part of a shared decision-making process, with the aim to reach the right decision for each individual based on their preferences and values.<sup>7</sup>

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