

A practical approach to oral immunotherapy for food allergy

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Oral immunotherapy (OIT) for food allergy was first reported in 1908¹ and again in 1935.² Over the next 45 years, there was very little published clinical research on food allergy treatment; however, during the latter part of the 20th century, coincident with a global increase in allergic diseases, there was a significant increase of scientific interest in food allergy, including treatment. During the 20 years preceding the 2005 establishment of the Consortium for Food Allergy Research (CoFAR), by the National Institute of Allergy and Infectious Diseases there were thousands of publications on food allergy, including many case reports and case collections of food allergy treatment, and OIT. By 2022, clinicians and investigators from around the world had reported extensively on food allergy treatment that used a variety of approaches. Although many different food immunotherapy treatment algorithms have been reported to effectively desensitize patients with food allergy, what the allergy community is lacking is high-quality data (i.e., prospective, double-blind, placebo-controlled trials) that define the best algorithms, approaches, and protocols for a variety of foods. However, many important questions will never be definitively answered by well-controlled studies; and no protocol will be suitable for all patients. Nevertheless, the millions of patients who are subject to the consequences of food allergy deserve better quality of life. Should these patients who are suffering need to wait until all the important questions with regard to food allergy treatment have been answered? Clearly, they should not.

When considering OIT, it is useful to keep in mind that 100 years separates the initial report of Freeman and Noon,³ who described subcutaneous allergen immunotherapy, and the American Academy of Allergy, Asthma & Immunology Allergen Immunotherapy practice parameters,⁴ which describes a standardized methodology. Patients with food allergy and clinicians operate in the gap between allergen avoidance and grade A quality data. To produce an OIT manual that will be useful to clinicians, we have asked the authors to bridge that gap. There is an extensive literature that describes the OIT experience with some foods (e.g., egg, milk, and peanut), whereas the published information on other foods comprises much less data, and, in some cases, only a few case reports. The authors of this manual have combined the information from published reports and their own clinical experience with the goal of providing general guidance with sufficient detail to enable readers to safely and effectively develop OIT programs for their patients.^{5–29} However, there are limitations and disclaimers with such a publication; this manual is not intended to be a “cookbook” applicable to all patients. We urge physicians to consider this manual in its entirety and to determine the appropriateness and safety for each patient on an individual basis. Although every effort has been taken to ensure that the information published in this manual is accurate, it is each clinician’s responsibility to review the original cited sources and to explain the risks associated with OIT to their patients. The sections on diagnosis, shared decision-making, and safety are at least as important as the dosing regimens for OIT foods. We recognize that many clinicians, in approaching their unique patients, will develop their own protocols that may be significantly different from some of the approaches presented in this manual. We also recognize the limitations that our field faces and that, because food allergy is an evolving science, we do not present this manual as the final word on food allergy treatment. We look forward to revisiting this manual in the years to come based on the developing research and experience on OIT for food allergy treatment.

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