Allergy Abstract

A **food allergy** is defined as an adverse health effect arising from a specific immune response that occurs reproducibly on exposure to a given food.

A **food** is defined as any substance—whether processed, semi processed, or raw—that is intended for human consumption, and includes drinks, chewing gum, food additives, and dietary supplements. Substances used only as drugs, tobacco products, and cosmetics (such as lip-care products) that may be ingested are not included. **Food allergens** are defined as those specific components of food or ingredients within food (typically proteins, but sometimes also chemical happens) that are recognized by allergen-specific immune cells and elicit specific immunologic reactions, resulting in characteristic symptoms. Some allergens (most often from fruits and vegetables) cause allergic reactions primarily if eaten when raw. However, most food allergens can still cause reactions even after they have been cooked or have undergone digestion in the stomach and intestines. Food allergy is an important public health problem that affects children and adults and may be increasing in prevalence. Despite the risk of severe allergic reactions and even death, there is no current treatment for food allergy: The disease can only be managed by allergen avoidance or treatment of symptoms. The diagnosis and management of food allergy also may vary from one clinical practice setting to another. Finally, because patients frequently confuse nonallergic food reactions, such as food intolerance, with food allergies, there is an unfounded belief among the public that food allergy prevalence is higher than it truly is. In response to these concerns, the National Institute of Allergy and Infectious Diseases, working with 34 professional organizations, federal agencies, and patient advocacy groups, led the development of clinical guidelines for the diagnosis and management of food allergy. These guidelines are intended for use by a wide variety of health care professionals, including family practice physicians, clinical specialists, and nurse practitioners. The guidelines include a consensus definition for food allergy, discuss comorbid conditions often associated with food allergy, and focus on both IgE-mediated and non-IgE-mediated reactions to food. Topics addressed include the epidemiology, natural history, diagnosis, and management of food allergy and the management of severe symptoms and anaphylaxis.

Diagnosis & Management This section of the Guidelines focuses on the diagnosis and management of food-induced anaphylaxis that arises through IgE-mediated immune mechanisms. Food-induced anaphylaxis is a potentially fatal disorder and, like other forms of anaphylaxis, is increasing in incidence in industrialized countries. Although food-induced anaphylaxis is not always easily recognized, the early recognition of specific signs and symptoms associated with a reaction, the timing of the reaction, and the existence of concomitant factors and disease processes help make the diagnosis. Prompt recognition and management are essential to ensure a good outcome. Anaphylaxis is significantly under-recognized and under-treated. One possible reason for this is the failure to appreciate that anaphylaxis can present without obvious cutaneous symptoms, which happens in 10% to 20% of cases, or without overt shock.

Guidelines The EP recommends that the management of food-induced anaphylaxis should focus on the following: Dosing with IM epinephrine followed by transfer to an emergency facility for observation and possible further treatment. Observation for 4 to 6 hours or longer based on severity of the reaction.

Education for patient and family on:

Allergen avoidance Early recognition of signs and symptoms of anaphylaxis. H_1 antihistamine: diphenhydramine every 6 hours for 2-3 days; alternative dosing with a non-sedating second generation antihistamine. H_2 antihistamine: ranitidine twice daily for 2-3 days. Corticosteroid: prednisone daily for 2-3 days

Follow-up appointment with primary health care professional (after the food-induced anaphylactic reaction), with consideration for additional follow-up with a clinical specialist such as an allergist/immunology.