



Glossary of Allergy Terms

Understanding Food Allergies in Infants and Children: The Symptoms, Diagnoses and Management

allergen: A substance that causes an allergic reaction after exposure.

allergic reaction: An immune response to a non-toxic substance.

allergy: A state of immune hypersensitivity reproducibly caused by exposure to a specific allergen.

amino acid-based formula or elemental formula: A hypoallergenic formula made with individual amino acids.

anaphylaxis: An immunologic reaction to a substance characterized by contraction of smooth muscle and dilation of capillaries; commonly occurs in response to allergen exposure.

angioedema or edema: Swelling.

atopic dermatitis: Skin disorder characterized by eczema and allergy; typically presents as a red, itchy rash on the cheeks, arms, and legs.

atopy: A state of immune hypersensitivity to allergens that encompasses asthma, hay fever, food allergy, and atopic dermatitis.

casein: The primary protein found in cow's milk.

colic: Pain of the gastrointestinal system; presents with crying and irritability in infants.

complementary food: Foods other than breast milk or infant formula introduced to provide nutrients.

cross-contact: The transfer of a food allergen to a food or surface intended to be allergen-free. This is distinct from cross-contamination, which is contamination of a food with microbial pathogens. Cross-contamination can be mitigated by heating or treating the food in another way, while cross-contact cannot be mitigated by cooking.

cross-reactivity: A reaction by the same antibodies to different food proteins that are highly similar.

elemental diet: A diet of predigested liquid containing amino acids, vitamins, minerals, electrolytes, and glucose.

elimination diet: A diet designed to detect a food that causes food allergies. Potential food allergens are systematically withdrawn from the diet, and symptoms are monitored throughout.

eosinophil: A white blood cell found at sites of infection or inflammation.

eosinophilic esophagitis (EoE): A non-IgE-mediated allergic disease of the esophagus characterized by a build-up of eosinophils in the esophagus in response to allergens.

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erythema: Reddening of the skin.

food: Any substance—whether processed, semiprocessed, or raw—intended or adapted for human consumption.

food allergen: Specific components of food recognized by immune cells that elicit allergic reactions.

food allergy: A condition in which a person has an allergic reaction that reproducibly occurs on exposure to or ingestion of a given food, most commonly caused by cow's milk protein, eggs, fish, shellfish, wheat, soy, peanuts, or tree nuts.

food protein-induced allergic proctocolitis (FPIAP): A non-IgE-mediated condition characterized by blood-streaked stools in otherwise healthy and thriving infants.

food protein-induced enterocolitis syndrome (FPIES): A non-IgE-mediated allergy caused by ingesting certain foods; symptoms include vomiting, diarrhea, and dehydration.

food protein-induced enteropathy (FPE): A non-IgE-mediated condition characterized by chronic diarrhea, vomiting, malabsorption, and hypoproteinemia.

hypersensitivity: Abnormal sensitivity or an exaggerated response to a substance.

IgE-mediated allergy: A condition in which allergic reactions are mediated by IgE antibodies in response to a food; typically characterized by an immediate presentation of systemic symptoms after ingestion of allergens.

in vitro allergy test: Immunoassay test to identify food-specific IgE antibodies in serum.

intolerance: A non-immunologic adverse reaction to food (eg, lactose intolerance).

lactose: The primary carbohydrate found in cow's milk and human milk.

microbiome: The microorganisms within a particular environment.

negative predictive value: The probability that patients with a negative screen test are truly negative for allergy.

non-IgE-mediated allergy: A condition in which allergic reactions are mediated by other components of the immune system besides IgE antibodies; typically characterized by a delayed presentation after ingestion of allergens, with symptoms limited to the gastrointestinal system.

oral food challenge: A highly accurate diagnostic test for food allergies that involves administration of allergenic food under specialist medical supervision.

partially hydrolyzed formula or hydrolysate formula: Infant formula with partially hydrolyzed cow's milk whey, consisting of shorter peptides; may be better tolerated by some infants but is not considered hypoallergenic.

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positive predictive value: The probability that patients with a positive screen test are truly positive for allergy.

prebiotics: Ingestible carbohydrates that stimulate favorable activity of endogenous probiotic bacteria.

probiotics: Ingestible microorganisms that alter host microflora and interfere with adherence of pathogenic bacteria.

pruritus: Itching.

sensitivity: The proportion of true positive patients that are correctly identified in diagnostic testing (sensitivity = [number of diseased people with positive test result] ÷ [total number of diseased people tested]).

sensitization: The induction of an acquired tolerance to an allergy, typically through low-level exposure.

skin test or skin prick test: A diagnostic test for determining food allergy by applying a food protein or allergen to the skin; allergic response is measured by skin wheal size.

specificity: The proportion of true negative patients that are correctly identified in diagnostic testing (specificity = [number of people without disease with negative test result] ÷ [total number of people without the disease tested]).

tolerance: A state in which an individual is symptom-free after consumption of a specific food or upon oral food challenge.

urticaria: Hives, or an outbreak of swollen, red bumps or wheals on the skin.

wheal: A papule or irregular plaque of swelling and redness on the skin, typically accompanied by intense itching.

whey: The primary protein found in human milk.

References

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