

Allergy and Infectious Diseases as “an adverse health effect arising from a specific immune response that occurs reproducibly on exposure to a given food” (Boyce, Assa'ad, Burks, et al, 2010, p. 1108). **Food allergens** are defined as specific components of food or ingredients in food (such as a protein) that are recognized by allergen-specific immune cells eliciting an immune reaction that results in the characteristic symptoms (Boyce, Assa'ad, Burks, et al, 2010). **Food intolerance** is said to exist when a food or food component elicits a reproducible adverse reaction but does not have an established or likely immunologic mechanism (Boyce, Assa'ad, Burks, et al, 2010). A person may have an immune-mediated allergy to cow's milk protein, but the person who is unable to digest the lactose in cow's milk is considered to be intolerant to cow's milk, not allergic as is the first person described. The National Institute of Allergy and Infectious Diseases guidelines classify food allergy according to the following: food-induced anaphylaxis, GI food allergies, and specific syndromes; cutaneous reactions to foods; respiratory manifestation; and Heiner syndrome (Boyce, Assa'ad, Burks, et al, 2010). The exact prevalence of food allergies in children is reported to be much lower than what parents report. Approximately 6% of children may experience food allergic reactions in the first 2 to 3 years of life; 1.5% will have an allergy to eggs, 2.5% to cow's milk, and 1% to peanuts (Sampson, Wang, Sicherer, 2016). Seafood allergies in children are reported to be low in the United States: 0.2% for fish and 0.5% for crustaceans (Boyce, Assa'ad, Burks, et al, 2010). The National Institute of Allergy and Infectious Diseases report further points out that most children will eventually be able to tolerate milk, eggs, soy, and wheat, but far fewer will ever tolerate tree nut and peanuts (Boyce, Assa'ad, Burks, et al, 2010). The National Institute of Allergy and Infectious Diseases report indicates that 50% to 90% of all presumed food allergies are not actually allergies. The National Institute of Allergy and Infectious Diseases guidelines also recommend the following (Boyce, Assa'ad, Burks, et al, 2010; Burks, Jones, Boyce, et al, 2011):

- Infants should be exclusively breastfed until 4 to 6 months old.
- Soy formula is not recommended to prevent the development of food allergy.
- Introduction of complementary foods should not be delayed