

Abstract: The prevalence of food allergy is rising rapidly in last two decades. It almost doubled between 1999 and 2011. It currently occurs in 6-8 % of children and 3-6 % of adults in Europe, and about 10 % in the US. Food allergy is more common in children than in adults and its prevalence differs in industrialized/westernized countries. The spectrum of most frequent triggering foods, symptoms of food allergy and types of food sensitization are geographically different. Until now, we have only limited data available of food allergies in patients in the Czech republic. The aim of the study was to gather epidemiological data of food allergies in patients from the Czech republic. We used electronic registry DAFALL (Database of Food Allergies) to prospectively collect data from patients with newly diagnosed food allergy. During the 3 years of follow up, 1747 patients with IgE or non-IgE mediated food allergy were enrolled into the registry. 22,1 % of them were infants, 26,1 % children at the age of 1 to 6 years, 24,9 % kids between 7 and 18 years and 26,9 % adults. We compared the most frequent types of food triggering reactions in different age groups, severity of symptoms, the prevalence of IgE sensitization considering available data from the other parts of Europe. We have found some specific patterns of Czech food allergic patients. Among the most important, it is low occurrence of reactions to fish and shellfish (except age group between 1 and 6 years of age), low occurrence of reactions to soy in all age groups and not so high occurrence of reactions to wheat. On the other hand, we have found high occurrence of reactions to seeds (mainly the poppy seed) and increasing number of reactions to cashew nut, mainly in children. Surprisingly, 250 of all patients (14,3 %) have reacted to peanut and peanut was the third most common allergen in kids of 1 to 18 years of age and fifth in adults. In 2,7 % of all reactions, the severity fulfilled the criteria of anaphylaxis. Most common triggers of these potentially life threatening event were cow's milk, peanut and fish. In 3,6 % of all reactions, patients reacted to inhalant contact with food allergen. Despite certain limitations, this work introduces the first data on the epidemiology of food allergies in the Czech republic using such a large population sample.