

Frequency of Immediate-Type Food Allergy in Children in Japan

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Key Words

Food allergy · Immediate-type hypersensitivity ·
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Introduction

The prevalence of allergy in children in Japan is increasing because of the changes in their life-style and diet caused by a strong western influence. Especially in the pediatric field, allergic diseases including food allergy are a growing problem. Many problems are related to food allergy but in the pediatric field, it is especially important to control the immediate-type reactions. The purpose of this study was to estimate the percentage of children in Japan with immediate-type reaction due to food allergy and the common types of food allergens.

Method

A questionnaire was drawn up and distributed nationwide to children under 6 years of age in nursery schools. The term 'food allergy' was omitted in the questionnaire to avoid any confusion regarding its definition. The specific symptoms were carefully described instead such as, 'Have you ever experienced discomfort or illness within an hour of ingestion of a certain type of food?' (cases of food poisoning were disregarded). This study was conducted between December 1, 1996 and January 1, 1997.

Table 1. Have you experienced skin symptoms or an uncomfortable feeling within 1 h after food intake (excluding food poisoning)?

	Response	
Yes	168	(12.6)
No	1168	(87.4)

Figures in parentheses represent percentage.

Results

(1) There were 1,548 responses of which 1,336 were analyzed in this study. (2) 12.6% of the children reported that they had experienced an allergic reaction within 1 h after food intake (table 1). (3) The ranking of the most common immediate-type symptoms were as follows (from most frequent to least frequent): 1 = urticaria, itching, 2 = blepharodema, 3 = diarrhea, 4 = sneezing, and 5 = dyspnea. (4) Egg/egg products appeared to be the most frequent food allergen (52.3%). The second and third most frequent were found to be milk/milk products (31.8%) and sea foods (10.6%), respectively (fig. 1). (5) Among children who underwent a prolonged food elimination diet, it was found that their physical growth (height and weight) was significantly slowed down.

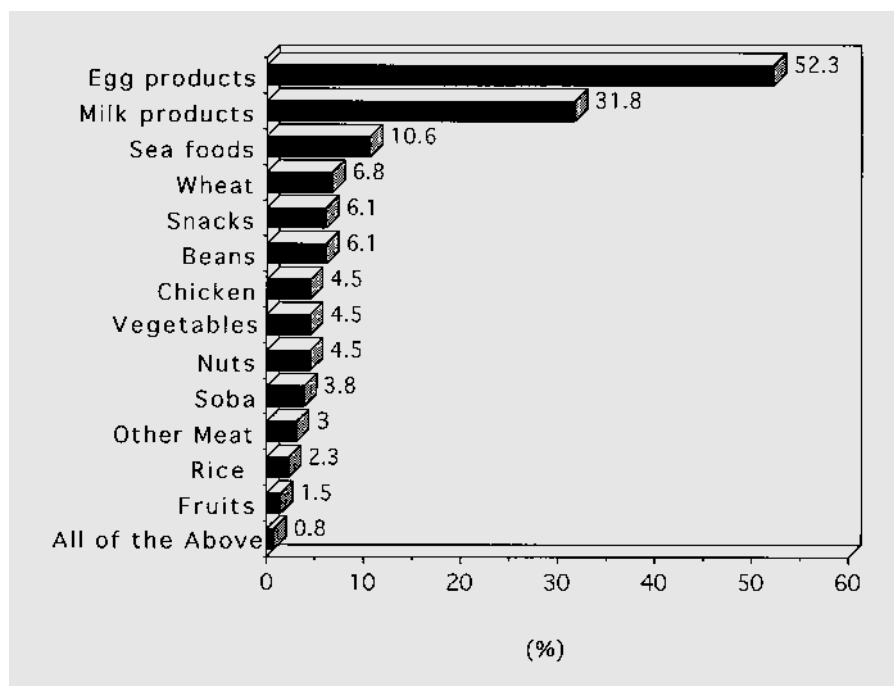


Fig. 1. Frequency of food eliminated after suffering from immediate-type allergic reaction among children in Japan.

Discussion

In drawing up the questionnaire, an important emphasis was made in omitting the term ‘food allergy’ so as to avoid any bias in the definition of this term. As a result of this questionnaire, it was found that 12.6% of the children experienced immediate-type allergic reaction whereas 40% responded that they had food allergy in the past study conducted in Japan. Furthermore, seafood was the third most common food allergen of immediate-type reactions

whereas it was found to be wheat in the past studies [1]. Results also showed that prolonged food elimination affected children’s growth, which is an important problem in the pediatric field.

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Reference

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