STUDY POPULATION. The study included 87 families with food-allergic children who ranged in age from birth to 18 years and attended a regularly scheduled clinic visit at the University of Maryland allergy practice (Baltimore, MD).

METHODS. A 32-item questionnaire was completed by the caregiver of the food-allergic child. The questionnaire evaluated the caregiver’s perception of the impact of the child’s food allergy on 8 aspects of daily family activities: meal preparation, family social activities, caregiver-supervised child social activities, school activities, family relations, caregiver stress and free time, and employment and finances. The caregiver rated each item as to its affect on a 7-point scale (1 indicating not at all and 7 indicating very much).

RESULTS. More than 60% of the families reported that food allergy affected meal preparation, and approximately ≥50% families indicated that food allergy significantly affected their family social activities. Greater than 50% of the caregivers felt that food allergy affected their child’s “playing at friend’s house” as well as autonomous social activities such as birthday parties and sleepovers. Forty-one percent of caregivers reported significant impact on their stress levels secondary to their child’s food allergy. Food allergy seemed to have a smaller impact on school attendance; only 34% of the families reported a significant affect, and 10% reported choosing to homeschool their children because of the food allergy. Parental employment, finances, and family relations were not significantly affected. The total number of food allergies for each child was significantly associated with the impact of food allergy on activity scores; however, neither the specific food to which the child was allergic nor the history of a previous anaphylactic reaction was related. Having a comorbid condition such as asthma and/or atopic dermatitis did not significantly affect the results.

CONCLUSIONS. Food allergy has a significant effect on the activities of daily living. Additional studies are needed to determine more detailed effects of food allergy on parent-child interactions, family relationships, and child development.

REVIEWER COMMENTS. It is important that the medical community recognize not only the medical significance of a food-allergy diagnosis but the emotional significance as well. Often, parents are unsure of where to turn for help. The Food Allergy & Anaphylaxis Network (www.foodallergy.org) is a helpful resource for the nuts and bolts of avoidance and strategies for day-to-day living. Children with food allergies may be at risk for difficulties with their social and emotional development. Thus, it is important that pediatric health practitioners address these issues with children and their families and, if needed, refer to mental health services.

Use of Complementary and Alternative Medicine by Food-Allergic Patients


PERSPECTIVE. To determine the prevalence of complementary and alternative medicine (CAM) use, the types of CAM modalities used, and opinions regarding CAM in food-allergic patients.

STUDY POPULATION. A total of 442 individuals were polled, 95% of whom were parents of food-allergic children. Two groups were evaluated by using an anonymous questionnaire: attendees at a Food Allergy & Anaphylaxis Network conference in 2002 and a convenience sample from the Pediatric Allergy and Immunology practice of Mount Sinai Medical Center (New York, NY). Three hundred eighty individuals filled out questionnaires, equal numbers from both groups.

METHODS. A 19-item questionnaire was constructed to collect data on types, frequency, and opinions of CAM use, severity of food allergy, and demographic information.

RESULTS. Diagnostic modalities considered unproven or disproven (including immunoglobulin G4 testing, kinesiology, electrodermal skin testing, and provocation testing) were used by 22% of the respondents. Chiropractors (10%) were the most common CAM providers, followed by homeopaths (5%), acupuncturists (4%), and herbologists (4%). Of food-allergic CAM users, 33% reported using chiropractic, 33% homeopathy, 17% Nambudripad’s allergy-elimination technique, 12% acupuncture, 9% massage, 6% acupuncture, and 3% reflexology. Sources of information about CAM included friends (39%), family (28%), the Internet (8%), and television (6%). Only 49% of the participants reported CAM use to their regular physicians. On a scale from 0 (not effective) to 5 (very effective), patients found that CAM therapies were not particularly effective (mean score: 2.08). If available, an herbal therapy of equal efficacy, safety, and cost was preferred as compared with a pharmaceutical drug (37% vs 12%; P = .001).

CONCLUSIONS. Unproven or disproven diagnostic methods and CAM treatments were used by ~20% of the respondents (most of whom were parents of food-allergic patients). Most of those who used CAM noted poor efficacy, but if given a choice, many would prefer herbal therapies to pharmaceutical drugs.
ANAPHYLAXIS

Administration of Epinephrine for Life-Threatening Allergic Reactions in School Settings

PURPOSE OF THE STUDY. To ascertain the incidence of anaphylaxis in schools, characterize the circumstances surrounding anaphylactic episodes, and evaluate practices that are used to manage students with life-threatening allergies.

STUDY POPULATION AND METHODS. School districts in Massachusetts (N = 109) that completed an epinephrine-administration form whenever epinephrine was injected at school. Data were obtained from September 2001 to August of 2003.

RESULTS. Forty-eight school districts noted a total of 159 administrations of epinephrine during the 2-year period of reporting. The individual was not known to have a life-threatening allergy in 24% of the cases. Thirty-one percent of the students who received epinephrine had allergy to multiple antigens, and 25% had allergy to tree nuts or peanuts only. Nineteen percent of the cases occurred outside the school building on a playground or when transporting them to or from school or on field trips. The registered school nurse in the health office administered the epinephrine in most cases. The average time from development of symptoms until epinephrine was delivered was 10 minutes. In 92% of the cases, the student involved was taken to a medical facility using the emergency medical system.

CONCLUSIONS. Anaphylactic reactions in schools, although not frequent, are not uncommon events. A systematic review of anaphylactic events that required epinephrine administration identified opportunities for improvement in the treatment of students with life-threatening allergies.

REVIEWER COMMENTS. The limitation of this study is that it was based on voluntary reporting. There are variations in reporting among regions in the state, but it is not possible to determine if the differences are attributable to reporting practices or actual difference in epinephrine administration. Because there were no unique identifiers for subjects in the study, there were no assurance that allergy events are not recurring repeatedly in the same student. In summary, a thorough program should be in place in the schools to evaluate, treat, and manage students with life-threatening anaphylaxis to foods.

Parental Knowledge and Use of Epinephrine Auto-injector for Children With Food Allergy

PURPOSE OF THE STUDY. To assess parental use and knowledge of an epinephrine autoinjector (EAI), Anapen, prescribed for their food-allergic child(ren), and to examine the availability of emergency kits and personalized care plans.

STUDY POPULATION. The parents of 152 food-allergic children prescribed an EAI between June 2000 and March 2003 at 1 of 5 children’s hospitals in northern France.

METHODS. An anonymous-questionnaire format was used to collect details on the child’s clinical manifestations of allergies, EAI education by a health care provider, verification of proper EAI use at each follow-up visit, availability of a personalized care plan at school, physician instructions in case of allergic reaction, and medications available at home or outside the home. Parents were also asked to list symptoms that required epinephrine (open-ended item).

RESULTS. One hundred nine families representing 111 children completed and returned the survey. The majority (90%) of families had the use of Anapen demonstrated (76% with a trainer device), and 83% had received written instructions. Nineteen percent had a repeat demonstration at follow-up visits, and 10% never received a demonstration; yet, 88% of parents felt that they could use an EAI in an emergency. Only 54% of school-aged children had a personalized care plan, and 11% had an EAI at school with no personalized care plan. Only 48% of the parents could list >1 symptom that required an EAI. There was no difference in the quality of instructions between pediatricians and allergists and no difference in knowledge between parental socioeconomic groups.

CONCLUSIONS. EAI’s and personal care plans were insufficiently available at schools and in daily life. Proper EAI use and education were unsatisfactory.

REVIEWER COMMENTS. This study emphasized the importance of extensive and repeated education about food-allergy risks and measures that need to be in place in case of an emergency. Although a majority of parents felt that they knew how to use an EAI, many could not recognize >1 symptom that would require the use of an EAI, and
Use of Complementary and Alternative Medicine by Food-Allergic Patients
Alan B. Goldsobel
*Pediatrics* 2007;120;S119
DOI: 10.1542/peds.2007-0846EE
Use of Complementary and Alternative Medicine by Food-Allergic Patients
Alan B. Goldsobel
Pediatrics 2007;120;S119
DOI: 10.1542/peds.2007-0846EE

The online version of this article, along with updated information and services, is located on the World Wide Web at:
/content/120/Supplement_3/S119