

Ask Dr. Sue your health and safety questions



Food Allergies Can Be Fatal

by Susan S. Aronson, MD

Early childhood is the most common time of life for food allergy. Some children do not tolerate certain foods, but an allergic reaction is different, and it can be life threatening. Doctors can use medical tests to determine whether a reaction is food intolerance or food allergy. For example, red skin around the face after eating tomatoes, oranges, or strawberries is common. Usually this is irritation from the chemicals in the food, not an allergic reaction.

An allergic reaction occurs when the immune system responds to a substance by releasing chemicals in the body that cause symptoms in the skin, intestine, respiratory or nervous system. It can occur immediately, within minutes, or be delayed for up to a few hours after the child eats the food. The allergic person may develop hives; or swelling of the mouth, hands, or feet; have trouble breathing; have an increased heart rate; or become unconscious. Physicians diagnose food allergy by looking for the specific chemical reaction that involves the immune system.

Since food allergy is so common, child care providers can expect to care for some children with this

problem. Avoiding the offending food completely is essential and demanding. The situation affects other children, too, because they cannot bring the offending food into the environment of the child who has the food allergy.

Under the Americans with Disabilities Act (ADA), children with potentially life-threatening food allergies are disabled persons. Your program must accommodate them by meeting their needs. Ask the allergic child's doctor to explain the child's problem and to provide documentation about what you need to do.

For each child with a food allergy, the child care provider needs a special care plan. The special care plan should address how to avoid the offending food and what to do if the child has an allergic reaction while in child care.

Prevention of food allergy requires strict avoidance of any contact with the offending material. If someone touches food with the offending ingredient, then touches a surface, there may be a tiny amount of the allergy-evoking ingredient left on the surface. Later, if an allergic person touches this surface, the result may be an allergic reaction. Avoidance must be rigorous.

Nearly all food allergies are to peanuts, eggs, milk, tree nuts, soy, wheat, or shellfish. Although peanut butter is a valuable part of many children's diets, peanuts are responsible for more allergic reactions than any other food. Since food manufacturers use ingredients that cause allergic reactions commonly, caregivers of allergic children must read every food label very carefully.

Eggs, milk, and milk products are in many other foods. Many products, such as bread, custard and cream-filled products, include eggs. Margarine, processed foods such as hot dogs and lunch meats, and even tuna fish may contain milk products in small quantities. (Some brands of tuna fish contain hydrolyzed casein, a milk by-product.) You will need to learn the synonyms for allergy-producing foods to be able to read labels for all the by-products that may contain offending ingredients.

Some food processors use peanuts to thicken spaghetti, chili, and gravy. Often, they add peanuts to other foods as flavoring. Usually, peanut oil is not a problem. In most commercial processing to produce peanut oil, the manufacturer removes the offending peanut

protein. However, watch out for cold-processed, expelled, or extruded oils. These may contain residual peanut protein.

Soybean, tree nuts, and wheat proteins are widespread, too. You will find soybean products in baked goods, canned tuna, cereals, crackers, sauces, gravies, candies, and soups. As with peanut oil, soybean oil may be safe if the manufacturer has removed all the soy protein in processing. Tree nuts appear as flavoring in many baked goods, in ice cream, and in other desserts. Wheat is in many baked goods, cereals, crackers, lunch meats, pasta, pizza, sauces, and snack foods — even some ice cream.

Food products associated with allergies may appear in unusual places. Animal pellet food, fish food, and birdseed mixtures may contain peanuts, wheat, eggs, and shellfish products. Beanbags may contain nut shells. Ham may have milk and soy added as binders.

Another problem is cross-contamination of foods that can occur during food preparation. Food handlers must clean all food utensils, counters, and cutting boards in hot soapy water between contact with different foods. To avoid inadvertent transfer of contents from one surface to another, cooks should cover pots carefully and rest cooking utensils for each type of food on a different plate.

One of the biggest challenges is to keep children from sharing an offending food with a child who is allergic. The Food Allergy Network (FAN) guidebook (see page 91 for more information) for child care offers strategies for each age group. For all age groups, the guidebook recommends labeling each container that is safe for the child with a food allergy. Parents must give consent for all the children, families, and staff to know about the child's allergy, so everyone helps to protect the child. The program's policy should be that an allergic child receives food labeled with that child's name only. Designate specific staff to be responsible for giving the allergic child food.

Since allergic children need developmental socialization, too, isolating them during mealtime is inappropriate. The allergic child should sit at a table with other children, with a designated staff member sitting close by to be sure that no child shares an offending food with the allergic child.

Although peanut allergy is the most common food allergy, banning peanuts from all child care settings is not appropriate. Peanuts are a good source of protein for children who are not allergic to them. Since

manufacturers put peanut products in many foods, the exclusion of peanuts in settings where no one is allergic to them would eliminate a large range of foods that bring variety to children's diets. If no one has a peanut allergy, elimination of all peanut products is not worth the trouble.

Despite all efforts to avoid offending foods, it is likely that an allergic child will be exposed to an offending food in child care. The child care staff must prepare for a food allergy emergency. Emergency instructions and medications should be very accessible. Consider hanging the child's medication on the wall, above child reach, on a red or pink paper. Attach the child's picture and write the child's name and foods to which the child is allergic in letters large enough to be seen across the room. In this situation, maintaining confidentiality could be life threatening. Parents must give permission for a public notice of the food allergy to protect their child. Be sure the medicine and someone who knows how to handle the child's allergy goes wherever the child goes. Although the reaction can be mild, most deaths from food allergy occur because observers did not take the reaction seriously at first, and delayed treatment.

Emergency preparedness for food allergy requires the ability to use injectable adrenaline (also called epinephrine) and oral antihistamines. The most commonly used antihistamine is diphenhydramine. The brand name of this drug is Benadryl®, but the generic form is fine. Other commonly used anti-histamines are chlorpheniramine (brand name Chlor-Trimeton®) and hydroxyzine (brand name Atarax®).

Injectable adrenaline comes in an automatic injector device called EpiPen®. Adrenaline also comes in a syringe kit called Ana Kit® or Ana Guard®, but the autoinjector (EpiPen®) is easier for child care staff to use in an emergency. Once you remove the safety device from the marker-sized autoinjector, you firmly press the device against the thigh and the device injects the medicine. The adrenaline dose lasts only for a short time — around 20 minutes. Someone must call the Emergency Medical System (911) right away.

Adrenaline works quickly to reverse the allergic reaction. Although it can cause some unpleasant symptoms, such as rapid heart beat, pallor, and nausea, do not delay treatment if you suspect an allergic reaction. Remember that you need a plan for the whole situation. Where in the facility will the child receive care when a reaction occurs? Who will take charge of the situation? What will caregivers do if the child is in the classroom,

Reminder: Get Your Flu Shot Now

All those with chronic illnesses and other adults who wish to reduce their risk for influenza should get the flu shot. Since exposure to young children may increase the risk of getting the flu, caregivers should ask for this immunization. Some people get a mild flu-like reaction to flu vaccine. For most, the only side effect is a little sore spot on the arm for a day or so. To get the best protection from the vaccine, get the shot in November or, at the latest, in December.

Also, the guidebook in the kit discusses how to handle legal issues, and how to educate staff, children, and parents of children who do not have food allergy. The guidebook includes recipes that omit the offending foods, tips for handling

on the playground, on a field trip? Where will you keep the medications to be sure they are accessible always? Who will call the Emergency Medical System (usually 911)? Who will call the parents? Who will go with the child to the hospital and stay until the parents can assume responsibility? Who will deal with the other children if the caregiver must take the allergic child away from the group?

Food allergy is one of many health problems child care personnel must learn to manage. Everyone needs to prepare to recognize an allergic reaction, even if no child in the facility has ever had an allergic reaction before. The first allergic reaction can occur while a child is in child care. Prepare and plan, so an avoidable tragedy does not happen in your program.

To provide guidance and training on food allergy for child care providers, FAN has a special kit, which includes two videotapes, a guidebook for child care providers, and training devices to teach caregivers how to give emergency medications. The kit costs \$75. By using the kit, caregivers learn how to keep children who have food allergies safe, what systems need to be in place to handle food allergy, and how to handle foods that are common causes of food allergy.

art projects, field trips and holidays where food is a part of the activity.

You can order the kit from FAN, 10400 Eaton Place, Suite 107, Fairfax, VA 22030. To place an order, call (800) 929-4040; for food allergy questions, call (703) 691-3179, or use the FAN e-mail address <fan@worldweb.net>. You can visit the FAN web site on the Internet at <www.foodallergy.org>. FAN posts alerts about improperly labeled food products which have common allergy-evoking ingredients.

EDITOR'S NOTE: A recent report shows a shipment of EpiEZ-Pen (lot number 6SA145) was recalled because the pen-size injector can prematurely activate, meaning it is ineffective when allergy sufferers use it. The recalled injectors were sold under the company names Survival Technology Inc. or Center Laboratories. Consumers may return the injectors to the place of purchase for a refund.

Susan S. Aronson, MD, FAAP, is clinical professor of pediatrics and a primary care pediatrician at St. Christopher's Primary Pediatric Practice at Allegheny University of the Health Sciences in Philadelphia, Pennsylvania.