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Food Allergies: Safe Food Handling to Prevent Triggering an Allergic Reaction

Carol Byrd-Bredbenner
Rutgers University, bredbenner@aesop.rutgers.edu

Jaclyn Maurer
Rutgers University, maurer@aesop.rutgers.edu



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Food Allergies: Safe Food Handling to Prevent Triggering an Allergic Reaction

Abstract

The prevalence of food allergies is on the rise, especially among children. Safe food handling is important for preventing triggering a food allergic reaction. Guidelines for safe food handling for food allergies are scarce; therefore, data from key-informant interviews with health professionals, food professionals, and the public were used to develop educational factsheets for food service and child caretakers. These factsheets can be used by Extension professionals for both self-education and outreach education on this increasingly important health topic.

Carol Byrd-Bredbenner

bredbenner@aesop.rutgers.edu

Jaclyn Maurer

maurer@aesop.rutgers.edu

Department of Nutritional Sciences
Rutgers University
New Brunswick, New Jersey

Introduction

Food allergies are a common, serious--and sometimes fatal--problem. Almost 11 million Americans have food allergies; many are children. The prevalence of food allergies, particularly among children, is on the rise (Sicherer, Munoz-Furlong, & Sampson, 2003, 2004). Although any food can cause an allergic reaction, eight foods, namely peanuts, tree nuts (like walnuts and cashews), milk, eggs, fish, shellfish, soy, and wheat account for 90% of all food allergies.

An allergic reaction is triggered when the immune system mistakenly overreacts to a food that it thinks is a harmful invader. This overreaction causes symptoms that may appear within seconds to hours after eating a trigger food. Fortunately, most allergic reactions are mild. They may cause a runny nose, sneezing, itching skin, hives, and digestive upset. For those who are severely allergic, exposure to a trigger food may cause life-threatening reactions. The tongue, lips, or throat may swell so severely that the person cannot breathe (Basset, 2005). Death will occur without immediate medical help. Unfortunately, sudden severe allergic reactions (known as "anaphylaxis") to food cause 200 deaths annually.

The only proven way to prevent triggering a reaction in those with a food allergy is to avoid the offending food. Avoidance measures include reading food labels for allergenic ingredients, asking questions about meal ingredients when eating outside of the home, and adopting food handling behaviors that prevent cross contact with allergens.

What Extension Professionals Can Do

Food is frequently present at Extension events as meals or snacks or as teaching aids in food and nutrition education programs. In addition, key Extension stakeholders include youth, many of whom likely have food allergies. Thus, it is imperative that Extension professionals arm themselves with the knowledge needed to safely handle foods to prevent triggering an allergic reaction. In addition, Extension professionals have numerous opportunities to teach others, especially children's caregivers (e.g., coaches, baby sitters, teachers), how to do the same.

Key Safe Food Handling Practices to Prevent Triggering a Food Allergy Reaction

1. Listen carefully when someone in your group indicates he or she has a food allergy.
 - a. Try to find out ahead of time if someone in your group has a food allergy, and adjust the menu or lesson whenever possible.
 - b. Explain to the person what you know to be true about the food being served or used in the lesson---don't be afraid to say you don't know.
2. Keep foods simple and safe.
 - a. Be aware that allergens often hide in soups, dips, and homemade goodies.
 - b. Check ingredient labels on food packages for allergens every time--food products may change.
 - i. The new food labeling law requires food manufacturers to disclose in plain language whether products contain any of the top eight food allergens.
 - c. Do not serve a food if you can't guarantee it will be allergen free, or ask the person with an allergy to bring his or her own snack.
3. Disclose ingredients used to prepare meals.
 - a. Avoid using "secret" ingredients. Always indicate whether key allergens are included in the recipe or may have come in contact with the food you are preparing or serving.
4. Prevent cross contact between allergen-containing and allergen-free foods.
 - a. Keep even a trace amount, part, or product of an allergenic food (e.g., peanut, peanut butter, peanut oil) from coming in contact with an allergen-free food or allergen-free food or surface (e.g., counter, bowl, spoon).
 - i. Cross contact measures are not the same as cross contamination measures used to prevent foodborne illness. That is, while many foodborne diseases can be prevented by cooking foods thoroughly, cooking a food containing an allergen will not make the food safe to eat by someone allergic to it.
 - b. Wash your hands, workspace, utensils, and pans, and make sure dishes are allergen-free before preparing foods.
 - c. Thoroughly clean up workspace after use.
5. Be in control of the eating situation.
 - a. Keep kids from trading meals and snacks.
 - b. Confine food to eating areas.
 - c. Have participants wash hands and eating areas after meals and snacks. (For example, a smudge of peanut residue on the table could trigger a reaction.)
 - d. Limit crafts that use food items.

What to Do in an Emergency

The steps above will help prevent a food allergy from being triggered. Unfortunately, accidents do happen. And sometimes a reaction occurs in someone who had not previously experienced a reaction; therefore, to play it safe, know what to do in an emergency. Symptoms may appear within seconds to hours.

1. Learn the symptoms: tingling sensation, itching, or metallic taste in the mouth; hives; a sensation of warmth; asthma symptoms; swelling of the mouth and throat area; difficulty breathing; vomiting; diarrhea; intestinal cramping; drop in blood pressure; and/or loss of consciousness.
2. If someone reports feeling sick after eating, take him or her seriously, and act quickly.

3. Call 911 or your local emergency service.

Educational Materials for Teaching Others About Food Allergies

New Jersey passed Public Law 2005, c.206 (A303 ACS 2R), which mandated the development and dissemination of educational materials to help food service personnel and the public, particularly children's caregivers, prevent triggering food allergic reactions. To guide the development of these materials, researchers reviewed existing food allergen educational materials and conducted key-informant interviews with health professionals (e.g., Registered Dietitians, physicians [allergist, pediatrician], local health officers, Registered Environmental Health Specialists, school nurse), food service experts (e.g., school food service administrators, restaurateurs, chefs), children's caregivers (e.g., parents, teachers, coaches, babysitters), allergy education experts, and food policy experts.

The materials that were developed included five informational factsheets, targeted to specific groups that contained guidelines for preventing triggering food allergic reactions. Figure 1 displays the factsheet developed for food service employees and children's caregivers, others are available at <<http://www.foodallergy.rutgers.edu>>. These factsheets were developed with the assistance of a professional graphic designer and are available in both English and Spanish. The materials serve as educational tools for Extension professionals to use in both their professional development as well as in outreach efforts such as in-service programs for restaurateurs, school lunch personnel, childcare providers, parents, and even youth who may find themselves hired to baby-sit a child with a food allergy. (For more information on factsheet development, refer to Maurer, Byrd-Bredbenner, & Grasso, in press).

Figure 1.
Food Allergy Factsheets (also available in Spanish)

Keep Kids With Food Allergies Safe: They're Counting On You At Home - In Class - After School

ASK BEFORE YOU eat

- Millions of children have food allergies.
- Food allergies are a matter of life or death.
- Tiny amounts of food allergens can kill.

GET READY...

Speak With Parents

- Listen carefully.
- Learn how to prevent food allergy reactions.
- Know the symptoms of food allergy reactions.
- Review steps to take in case of a reaction.
- Know how to reach parents in an emergency.

GET SET...

Serve Allergen-Free Foods

- Keep foods simple — allergens often hide in soups, dips, and homemade goodies.
- Check food labels for allergens every time — food products may change.
- Stop cross-contact — prepare foods with clean hands, workspace, utensils, pans, and dishes.

GO...

Keep Kids Safe

- Remind kids to ask before they eat — "Is this safe for me?"
- Keep kids from trading meats and snacks.
- Confine food to eating areas.
- Wash hands and eating areas after meals and snacks.
- Limit crafts that use food items.
- Act quickly if a child reports feeling sick after eating.

SPOT A REACTION — Save a Life!

- Symptoms appear within seconds to hours.
- Symptoms range from skin rash to trouble breathing to death.
- Get help right away — **CALL 911**

Any food can be an Allergen!

The most common food allergens are:

Tree Nuts & Peanuts	Milk Products	Soy
Wheat	Fish & Shellfish	Eggs

Get More Information: <http://www.foodallergy.rutgers.edu>

Food Allergies It's a Matter of Life or Death

KNOW BEFORE YOU SERVE

▶ MILLIONS HAVE FOOD ALLERGIES. THE NUMBERS ARE GROWING.
▶ TINY AMOUNTS OF FOOD ALLERGENS CAN KILL.

EVERY FOOD HANDLER CAN SAVE A LIFE!

Any food can be an Allergen!

The most common food allergens are:

Peanuts/Tree Nuts	Milk Products	Soy
Wheat	Fish/Shellfish	Eggs

1 Take Customer Requests Seriously

- Listen carefully.
- Tell the chef about the food allergy.
- Report back to customers how you can meet their needs.

2 Check for Allergens Every Time

- Check recipes and food labels — food products may change.
- Beware of allergens hiding in foods like sauces, soups, dressings, and oils.

3 Stop Cross Contact

- Keep orders allergen-free from start to finish.
- Start fresh — clean hands, gloves, workspace, utensils, pans, and dishes.
- Double check orders before serving — serve only if allergen-free.

SPOT A REACTION

- Symptoms appear within seconds to hours.
- Symptoms range from skin rash, to trouble breathing, to death.

Save a Life!

CALL 911 (emergency)
If a customer is in distress

- Tell Management.
- Stay with customer until help arrives.

ASK BEFORE YOU eat

KNOW BEFORE YOU SERVE

Conclusion

Safe food handling extends beyond preventing food illness caused by foodborne pathogens; it also involves knowing how to prevent triggering a food allergic reaction. Extension professionals likely will face increasing numbers of clientele in their outreach efforts who are affected, personally as well as professionally (e.g., teachers, day care) by food allergies. The educational factsheets and food handling guidelines presented in this article can help Extension professional meet the challenge of preventing triggering a food allergic reaction themselves as well as educating others to accomplish the same.

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