From Delivery to Dining:
Components of an Effective Food Allergen Control Plan

Bonnie Johnson, MS, RD
Objectives

• List the critical points of a food allergen control plan.

• Explain the need for a food allergen control plan and the consequences of not following it.

• Assemble a multidisciplinary team to develop a food allergen control plan.
Food Allergy: A Growing Topic

• 5% of children and 4% of adults have a food allergy (1). While anyone can be allergic to any food, there are eight foods that cause 90% of allergic reactions (2).

• Allergy prevalence among US population (1):
  – Dairy 2.5%
  – Fish & Shellfish 2.4%
  – Egg 1.3%
  – Peanut 0.6%
  – Tree Nuts 0.5%
  – Soy 0.4%
  – Wheat 0.4%
Food Allergens are on the Menu

• http://www.wordle.net/show/wrdl/3643139/SchoolMenus
Food Allergy: Reactions

• A food allergy is an immune reaction (usually to a protein) that can manifest in different ways.

  ANY FOOD CAN CAUSE AN ALLERGIC REACTION

• Reactions are unpredictable. (8)
• The severity of a reaction is dependent on many factors. (8)
• An allergic reaction to food can take place within a few minutes to an hour.
• An allergic reaction can cause a wide array of symptoms. (1)
• Anaphylaxis is the most severe reaction. (1)
• A food intolerance is NOT the same as an allergy.
Food Allergy: Reactions

• **Ingestion**: Severe reactions can occur when an allergen is ingested. Symptoms generally involve the GI system such as vomiting, diarrhea, or pain. In rare cases ingestion can cause anaphylaxis. (1)

• **Skin Contact**: Cannot cause anaphylaxis. Most reactions are localized to the point of contact like a rash or hives. (9)

• **Smelling/Inhalation**: Cannot cause anaphylaxis. Most reactions include sneezing, running nose and coughing. (9)
Food Allergen Control: Protects Customers, Protects You

- Assemble a team
- Conduct an assessment & prioritize
- Develop an allergen process flow diagram
- Review regularly
The Team

- Ordering
  - labeling
  - certification
- Warehouse
  - receiving
  - storage
- Preparation
  - ingredients
  - equipment
- Service
  - recipes
  - caution
- Engineering
  - cleaning
  - sanitization
Risk Assessment & Allergen Map

• Scavenger hunt
  – Find every possible allergen and tag with a sticky note

• Review purchasing log for allergens that may not be present at the time

• Take each allergen on its usual path through your operation
  – From door to floor

• Make a map for each allergen then lay them over each other
Allergen Map

• Use overlay map to create an allergen-free zone and/or an allergen only area.
Purchasing & Receiving

• Ask suppliers for their allergen control plan
• Question suppliers on ingredients and product labels.
  – Renovations happen all the time, be aware when allergens are added or removed from commonly used ingredients/products
  – Audit suppliers
  – Ask suppliers to clearly mark all containers
• Review labels of incoming materials.
• Tag each case/pallet/bag with allergen to clearly identify ingredients.
  – Color code
• Do not accept damaged containers when potential cross-contact with allergens may have occurred.
Storage

- Store allergenic ingredients/products separately to prevent cross-contact:
  - Use clean & closed containers
  - Designate separate storage areas for allergenic and non-allergenic ingredients
  - If not possible, prevent cross-contact by implementing other policies:
    - Don’t store allergens OVER non-allergens
    - Use dedicated pallets and bins
  - Document clean-up procedures for spills or damaged containers of allergens
Preparation

• Create a schedule
  – prepare items with allergenic ingredients at the end
  – designate employees to work only with allergens or non-allergen products
  – sanitize immediately after preparing a food with an allergen

• Create a space
  – designate an area for preparing foods with allergens
Preparation

• Designate equipment for preparing foods with allergens
  – Use a color coded system on equipment too
  – If not possible, implement strict sanitization procedures
• Using the allergen map to reduce the traffic of raw materials thru the space when allergens are being prepared
• Prepare like allergen foods together
• Don’t reuse water or oil after allergen has be come in contact with it.
Service

• Clearly identify menu items that contain allergens (all allergens)
  – Use color codes

• Instruct service staff on presence of allergens before each service
  – Designate a “go-to” person

• All employees must feel comfortable saying “I don’t know”. Even after consulting with a manager about the details if you have doubts about whether a product is safe, BE HONEST!
Clean-Up

• Protocols for cleaning allergen-prep areas and equipment should be clearly written and easy to follow and understand.
  – What is to be cleaned & sanitized
  – Who is responsible for cleaning & sanitizing
  – When to clean & sanitize
  – What to use to clean
  – Train on proper procedures
Cleaning Procedure

• Pre-cleaning – Scrape and rinse to remove loose food.

• Wash - Use detergent solutions to remove stuck-on food.
  • Detergent MUST be used to deactivate the protein that is the allergen.
    • Most household cleaners will work (Formula 409, Lysol, Target cleaner with bleach)
      • Except dishwashing liquid and antibacterial products
  • Sanitizing solution is NOT enough.

• Rinse to remove food and detergent.
• Sanitize to kill attached surviving bacteria and viruses.
Clean at Every Step

- Lifting peanut butter cookies from baking sheet with a spatula and then using the same spatula to lift sugar cookies.
- Using a knife to make peanut butter sandwiches, wiping the knife and then using that same knife to spread mustard on a peanut allergic child’s cheese sandwich.
- Thoroughly clean and then sanitize food contact surfaces of equipment and utensils such as slicer blades and can openers, if it has been used for items that contain allergens.
- Wash and then sanitize trays or baking sheets after each use. Oils containing allergens can seep through paper pan liners and contaminate the next food item place on the sheet or tray.
Training

• All staff should receive general training on food allergen awareness and control.
  – Including what an allergic reaction looks like and how to respond

• Call out the reasons protocols are required and the potential consequences should the plan is not be followed.
Reminders

• Any food can trigger an allergic reaction for someone who is allergic.

• Even trace amounts of an allergen can cause an allergic reaction in highly sensitive people.
  – There is no test to see how sensitive people are.

• Take all food allergies seriously.

• Treat all customers with food allergies with respect and understanding.

• Be honest...err on the side of caution.
Responding to An Allergic Reaction

• Many of your customers who have people a severe food allergies will NOT carry portable injectable epinephrine.
• Know where the “epi-pen” is in your school.
• Fight to have an “epi-pen” or two in your operation.
• Regulations vary by state
• Work with the school nurse
• It IS your responsibility to be able to respond to any kind of medical emergency.
• Have emergency medical numbers posted near every phone.
• Train staff to respond quickly in an emergency.
• Never second guess an emergency.
References

1. National Institute of Allergy and Infectious Diseases: www3.niaid.nih.gov
8. Food allergy myths. The Food Allergy and Anaphylaxic Network. Faan.org/page/myths