Food Allergies: A Growing Public Health Issue

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Coordinator, Carle Food Allergy Education Program
What IS Food Allergy?

- A food allergy is an abnormal response by the immune system to a certain food protein.
- When the food is **eaten**, the immune system “attacks” the enemy food protein.
- Every three minutes, a food allergy reaction sends someone to the emergency department.
- Reactions can range from mild to severe, including the potentially life-threatening condition known as anaphylaxis.
- 40% have anaphylaxis history.
Food Allergy is NOT...

- An intolerance (lactose, gluten)
- A toxic reaction (food poisoning)
- A pharmacologic reaction
- An aversion (he/she doesn’t like it)
- Psychogenic

Think digestion problem vs. Immune system problem
Food Allergy is Different!

~ Reaction mediated by the immune system which is rapid in onset and involves allergic symptoms.
Common Allergens

- Cow’s milk
- Egg white
- Peanut
- Tree nuts
- Soy
- Wheat
- Fish (fins)
- Shellfish
- Sesame
WHY? WHY? WHY?

Several theories have emerged regarding increase in food allergy

- Hygiene Hypothesis
- Gut Microbiome Changes
- Processed Foods (developed countries)
- Avoidance of the Top 8 (LEAP study)
MYTH OR FACT:

• Any food allergy reaction can be deadly

FACT!

• NOTHING can predict the severity of a future reaction, including testing or past reactions.
Myth or Fact:

• Food allergic persons can sometimes tolerate “a little” of the food they’re allergic to… **MYTH!**

• In true food allergy, a reaction will happen with even trace amounts of exposure.
Myth or Fact:

- Smelling a food could possibly cause a reaction

**MYTH!**

- Steam from cooked food
- Peanut dust

**FACT!**
Myth or Fact:

- Peanut oil is SAFE for people allergic to those foods
Symptoms of Allergic Reaction

- Itching, tingling or swelling of the lips, or mouth
- Tongue swelling, tightening in the throat, hoarseness, throat clearing
- Skin pale/blue, weak pulse, low blood pressure, confusion, fainting, shock
- Hives, an itchy rash, swelling of the face or extremities, skin redness
- Shortness of breath, repetitive coughing, wheezing
- Nausea, abdominal cramps, vomiting and diarrhea

2 hours!
**Treatment - Epinephrine auto-injectors**

- **Antihistamines** will NOT stop anaphylaxis
- First line treatment for severe allergic reaction is **EPINEPHRINE** - EpiPen, AuviQ or Adrenaclick
- **ZERO** contraindications

- ***FOLLOW THE PRESCRIBED ACTION PLAN***
Illinois Food Allergy Emergency Action Plan & Treatment Authorization

Spanish version @ foodallergy.org

- MEDICAL-LEGAL DOCUMENT
- WRITTEN BY PRESCRIBING PROVIDER
- DERIVED FROM ANAPHYLAXIS TREATMENT GUIDELINES
- EVERY FOOD ALLERGIC CHILD SHOULD HAVE ONE
Restaurant considerations:

- Eating away from home can pose a significant risk to people affected by food allergy. Research suggests that more than half of fatal food allergy reactions are triggered by food consumed outside the home.
- Potential areas of risk include cross-contact with allergens either in the kitchen or supply chain, incomplete knowledge of ingredients by staff, lack of communication between diner and staff, and medically inaccurate information about food allergy severity.
- National Restaurant Association Survey:
  - 87% of restaurants believe food allergies are extremely important and expect increased attention to it.
  - 53% state they do not train their staff on food allergens.
- The impact of food allergies is both a challenge and opportunity for the food service industry.
- Lost Revenue = $45 million/week
- Global Food Market for Food Allergy by 2020 = $24.8 billion
Restaurant Requirements

- PA 100-0367 (2017) Amendment to Food Handling Regulation Enforcement Act
- Illinois Requires Certification for Category 1 restaurants
- All certified food protection managers (CFPM)
- Recertify every 3 years
- ANSI (American National Standards Institute) 23 accredited programs
PREVENT a reaction: Label Reading

- Read *every* label *every* time
  - Formulations can change without warning
  - Don’t rely on “safe lists”
- Totally avoid all foods that contain food allergen on the label even if only on a precautionary statement like “may contain”
- Allergens can be in non-food items
  - Soaps, shampoos, skin products, medications, pet foods, and many school products

Refer to FARE “Reducing the Risk” handout
Nutrition Facts

Ingredients: Enriched flour (wheat flour, malted barley, niacin, reduced iron, thiamin mononitrate, riboflavin, folic acid), sugar, partially hydrogenated cottonseed oil, high fructose corn syrup, whey (milk), eggs, vanilla, natural and artificial flavoring, salt, leavening (sodium acid pyrophosphate, monocalcium phosphate), lecithin (soy), mono- and diglycerides.

Any Cookie Company
College Park, MD 20740

(1) Include the name of the food source in parenthesis following the common or usual name of the major food allergen in the list of ingredients in instances when the name of the food source of the major food allergen does not appear elsewhere in the ingredient statement for another allergenic ingredient.

Nutrition Facts

Ingredients: Enriched flour (flour, malted barley, niacin, reduced iron, thiamin mononitrate, riboflavin, folic acid), sugar, partially hydrogenated cottonseed oil, high fructose corn syrup, whey, eggs, vanilla, natural and artificial flavoring, salt, leavening (sodium acid pyrophosphate, monocalcium phosphate), lecithin, mono- and diglycerides.


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(2) Place the word "Contains," followed by the name of the food source from which the major food allergen is derived, immediately after or adjacent to the list of ingredients, in a type size that is no smaller than that used for the ingredient list.
**Food Allergies**

*what you need to know*

Millions of people have food allergies that can range from mild to life-threatening.

**Most Common Food Allergens**

- Peanuts
- Tree nuts
- Fish
- Shellfish
- Eggs
- Milk
- Wheat
- Soy

*Always let the guest make their own informed decision.*

When a guest informs you that someone in their party has a food allergy, follow the four R's below:

- **Refer** the food allergy concern to the department manager, or person in charge.
- **Review** the food allergy with the customer and check ingredient labels.
- **Remember** to check the preparation procedure for potential cross-contact.
- **Respond** to the customer and inform them of your findings.

**Sources of Cross-Contact:**

- Cooking oils, splitter, and steam from cooking foods.
- All utensils (i.e. spoons, knives, spatulas, tongs), cutting boards, bowls, pots, food pans, sheet pans, preparation surfaces.
- Fryers and grills.
- Wash hands and change gloves after handling potential food allergens.

If a guest has an allergic reaction, call 911 and notify management.

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**Alergias Alimenticias**

*lo que necesita saber*

Millones de personas padecen de alergias alimenticias que pueden variar desde casos leves hasta casos que amenazan la vida.

**Alérgenos Alimenticios Más Comunes**

- Mani
- Nueces
- Pescado
- Mariscos
- Huevos
- Lechuga
- Trigo
- Soya

*Síembre permita que el visitante tome sus propias decisiones informadas*

Cuando un visitante le informa que alguien en su grupo padece de una alergia alimenticia, siga las cuatro R que presentamos a continuación:

- **Refría** el asunto sobre alergia alimenticia al Chef, Gerente o persona a cargo.
- **Revisé** la alergia alimenticia con el visitante y examine las etiquetas de ingredientes.
- **Recuerde** examinar los procesos de preparación para ver si se produce contacto cruzado.
- **Respondá** a los visitantes e informeles de sus hallazgos.

**Fuentes de contacto cruzado de alimentos:**

- El salpique o vapor emanado del cocimiento de alimentos.
- Lavado con agua caliente y jabón, lo siguiente cuando han sido utilizados para cocinar o almacenar alimentos que causan alergias:
- Equipos, envases, mostradores y superficies para cortar.
- Las tablas para cortar alimentos, utensilios, espátulas, bandejas para galletas, olivas y sartenes, INCLUYE A LOS RECIÉNTECES PARA FREIR y PARRILLERAS.

Si un visitante tiene una reacción alérgica, notifique a la gerencia y llame al 911.
FOOD ALLERGIES: KEEP YOUR GUESTS SAFE

EVERY 3 MINUTES A FOOD ALLERGY REACTION SENDS SOMEONE TO THE EMERGENCY ROOM.

THE "TOP EIGHT" COMMON FOOD ALLERGENS:

Peanuts - Tree Nuts - Fish - Shellfish - Egg - Milk - Wheat - Soy

Food allergies are serious. AN ALLERGIC REACTION TO FOOD CAN CAUSE DEATH. When you are serving a person with a food allergy:

AVOID CROSS-CONTACT FROM THE START.
Clean the dining area with clean soap and water and a clean towel between each guest.

MAKE SURE YOU UNDERSTAND THE ALLERGY.
Write down the guest’s allergy to record the conversation. If you have questions, ask the guest.

TAKE ALL FOOD ALLERGY REQUESTS SERIOUSLY.
Refer the allergy to the chef, manager or person in charge.

USE ONLY FRESH INGREDIENTS, INCLUDING COOKING OIL.

GET IT THERE SAFELY.
Double check with the chef to make sure you have the right meal. Don’t let anyone else make or eat the food.

CHECK WITH THE GUEST TO MAKE SURE THEY ARE SATISFIED WITH THEIR MEAL.

CALL 911 AT THE FIRST SIGN OF A REACTION!

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FARE Menu Trino • www.faremenuinfo.com • (800) 777-2510
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ALERGIAS ALIMENTARIAS:
MANTENGA SUS COMENSALES FUERA DE PELIGRO

CADA 3 MINUTOS UNA REACCIÓN ALÉRGICA ENVÍA A ALGUIEN AL SERVICIO DE URGENCIAS.

LOS "OCHO MEJORES" LAS ALERGIAS A LOS ALIMENTOS COMÚNES:

Cacahuates - Nueces de Kórol - Pescado - Crustáceos - Huevos - Leche - Trigo - Yogurt

Las alergias alimentarias son graves. UNA REACCIÓN ALÉRGICA A LOS ALIMENTOS PUEDE CAUSAR LA MUERTE. Cuando usted está sirviendo una persona con una alergia a los alimentos:

EVITE EL CONTACTO – CRUZADO DESDE EL PRINCIPIO.
Limpie la zona de servir con jabón y agua limpia y una toalla limpia entre cada comensal.

ASEGÚRESE DE ENTENDER LA ALERGIA.
Acerca de la alergia de los clientes y registre la conversación. Si tiene alguna pregunta, pídale al comensal.

EVITE EL CONTACTO CRUZADO!
Todo el equipo de la alimentación que se utiliza en el manejo y procesamiento de alimentos alérgico debe limpiarse y desinfectarse antes de usarse correctamente.

CONSULTE CON EL COMENSAL PARA ASEGURARSE DE QUE ESTA SARSIFICÓ CON SU COMIDA.

TRANSPORTE LA COMIDA CON SEGURIDAD.
Verifique con el chef para asegurarse de que tiene la comida correcta. No debe usar manteles y guantes. Ubique la comida especial a la mesa separado.

UTILICE SOLAMENTE LOS INGREDIENTES PRESCISOS, INCLUYENDO ACEITE DE COCINAR.

ASEGÚRESE DE QUE LA COMIDA SEA DE ALimento ALÉRGIco.

Evite la conversación con el chef para asegurarse de que tiene la comida correcta. No debe usar manteles y guantes. Ubique la comida especial a la mesa separado.

TEMA CON EL COMENSAL PARA ASEGURARSE DE QUE ESTA SARSIFICÓ CON SU COMIDA.

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Evite la conversación con el chef para asegurar...
**Prevent Cross-Contact**

Keep diners with food allergies safe. Even a tiny amount of an allergen can cause a severe and potentially life-threatening allergic reaction.

<table>
<thead>
<tr>
<th>Cross-Contact</th>
<th>Cross-Contamination</th>
</tr>
</thead>
<tbody>
<tr>
<td>Occurs when an allergen is unintentionally transferred from one food to another</td>
<td>Occurs when microorganisms like bacteria contaminate food</td>
</tr>
<tr>
<td>Can cause food allergy reactions</td>
<td>Can cause foodborne illnesses</td>
</tr>
<tr>
<td>Proper cooking does NOT reduce or eliminate the chances of a food allergy reaction</td>
<td>Proper cooking may reduce or eliminate the chances of foodborne illness</td>
</tr>
</tbody>
</table>

Always wash hands and change gloves between preparing different menu items.

Clean and sanitize surfaces between every menu item: countertops, cutting boards, flat-top grills, etc.

Always use clean kitchen tools for food preparation: pots, baking sheets, utensils, cutting boards, etc.

Prepare meals on top of barriers like cutting boards, foil, deli paper, etc.

Remember: If a mistake is made, you must start over and remake the allergy-friendly meal.

**Proper Cleaning to Remove Allergens**

- Wash with warm, soapy water
- Rinse with clean water
- Dry with a fresh cloth

**Top 8 Allergens**

- Milk
- Wheat
- Eggs
- Soy
- Shellfish
- Peanuts
- Tree Nuts
- Fish

**Evite el contacto cruzado**

Mantenga la seguridad de los comensales con alergias a alimentos. Incluso una pequeña cantidad del alérgeno puede causar una severa reacción alérgica que puede ser mortal.

<table>
<thead>
<tr>
<th>Contacto cruzado</th>
<th>Contaminación cruzada</th>
</tr>
</thead>
<tbody>
<tr>
<td>Se produce cuando un alérgeno se transfiere involuntariamente de un alimento a otro</td>
<td>Se produce cuando los microorganismos, como las bacterias, contaminan los alimentos.</td>
</tr>
<tr>
<td>Puede causar reacciones alérgicas a alimentos</td>
<td>Puede causar enfermedades transmISIBLES por alimentos.</td>
</tr>
<tr>
<td>La cocción adecuada NO reduce o elimina la posibilidad de una reacción alérgica a los alimentos</td>
<td>La cocción adecuada puede reducir o eliminar las posibilidades de enfermedades transmitidas por alimentos.</td>
</tr>
</tbody>
</table>

- Siempre lávelse las manos y cámbiase los guantes entre la preparación de diversos elementos del menú.
- Limpie y desinfecte las superficies entre cada elemento del menú: encimeras, tablas de cortar, parrillas, etc.
- Utilice siempre utensilios limpios para la preparación de alimentos: ollas, bandeja de horno, utensilios, tablas de cortar, etc.
- Prepare las comidas sobre barreras tales como tabla de cortar, papel de aluminio, papel deli, etc.
- Recuerde: Si se comete un error, debe empezar de nuevo y rehacer la comida libre de alérgenos.

**Limpieza adecuada para eliminar los alérgenos**

- Lave con agua caliente jabonosa
- Enjuague con agua limpia
- Seque con un paño limpio

**Los 8 alérgenos principales**

- Leche
- Trigo
- Huesos
- Soja
- Arándanos
- Cigüeñas
- Nueces
- Pescado

- Más de 170 alimentos han causado reacciones alérgicas a alimentos.

[www.foodallergy.org](http://www.foodallergy.org)

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Sources of Cross-Contact

Cross-contact occurs when an allergen is unintentionally transferred from one food to another. Even a tiny amount of an allergen can cause a severe and potentially life-threatening reaction.

<table>
<thead>
<tr>
<th>Source of Cross-Contact</th>
<th>Example:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hands</td>
<td>Washing shrimp and then preparing a salad</td>
</tr>
<tr>
<td></td>
<td>Touching almonds and then making pasta</td>
</tr>
<tr>
<td>Utensils, cutting boards, baking sheets, pots &amp; pans</td>
<td>Using the same spatula to flip a hamburger after a cheeseburger</td>
</tr>
<tr>
<td></td>
<td>Slicing cheese and their vegetables on the same cutting board</td>
</tr>
<tr>
<td>Preparation and cooking surfaces</td>
<td>Preparing different kinds of sandwiches on the same countertop</td>
</tr>
<tr>
<td></td>
<td>Cooking fish and chicken on the same flat top grill</td>
</tr>
<tr>
<td>Steam, splatter, flour dust and crumbs</td>
<td>Steam from cooking fish or shellfish touches nearby foods</td>
</tr>
<tr>
<td></td>
<td>Baking flour from previous meals splatters onto bread</td>
</tr>
<tr>
<td>Refrigerator, freezer and storage areas</td>
<td>Ranch dressing drips onto a cigarette stored on a lower shelf</td>
</tr>
<tr>
<td></td>
<td>Milk leaks onto margarine stored on the same shelf</td>
</tr>
<tr>
<td>Deep fryers and cooking oils</td>
<td>Making french fries in a deep fryer after chicken tenders</td>
</tr>
<tr>
<td></td>
<td>Re-frying cooking oil to avoid green beans after frying fish</td>
</tr>
<tr>
<td>Condiments, nut butters and jellypens</td>
<td>Chopping a knife used to spread peanut butter into a jelly jar</td>
</tr>
<tr>
<td></td>
<td>Touching the tip of a squeeze ketchup bottle to a breaded chicken breast</td>
</tr>
<tr>
<td>Shortcuts</td>
<td>Picking onions off a salad</td>
</tr>
<tr>
<td></td>
<td>Scraping egg off a plate</td>
</tr>
</tbody>
</table>

Proper Cleaning to Remove Allergens

- Wash with warm, soapy water
- Rinse with clean water
- Dry with a fresh cloth

For each new item, use clean:

- Hands
- Latex-Free Gloves
- Utensils Surfaces
- Oil and Water Pots/Pans/Baking Sheets

Top 8 Allergens

- MILK
- WHEAT
- EGGS
- SOY
- SHELLFISH
- PEANUTS
- TREE NUTS
- FISH

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Examples of cross-contact

<table>
<thead>
<tr>
<th>Direct Cross-Contact (allergen was directly applied and then removed)</th>
<th>Indirect Cross-Contact (allergen was not directly applied)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peeling cheese off a cheeseburger to make it a hamburger</td>
<td>Using the same spatula that flipped a cheeseburger to flip a hamburger</td>
</tr>
<tr>
<td>Removing shrimp from a salad</td>
<td>Not washing hands after handling shrimp before making the next salad</td>
</tr>
<tr>
<td>Scraping peanut butter off a piece of bread and using it to make a different sandwich</td>
<td>Wiping off—not properly cleaning—a knife used to spread peanut butter before using it to spread jelly</td>
</tr>
</tbody>
</table>
Recognize and Respond to Anaphylaxis

For a suspected or active food allergy reaction

**SEVERE SYMPTOMS**

1. **LUNG:** Short of breath, wheezing, repetitive cough
2. **HEART:** Pale or bluish skin, faintness, weak pulse, dizziness
3. **THROAT:** Tight or hoarse throat, trouble breathing or swallowing
4. **MOUTH:** Significant swelling of the tongue or lips
5. **SKIN:** Many hives over body, widespread redness
6. **GUT:** Repetitive vomiting, severe diarrhea
7. **OTHER:** Feeling something bad is about to happen, anxiety, confusion

**INJECT EPINEPHRINE IMMEDIATELY**

1. **INJECT EPINEPHRINE IMMEDIATELY**

   **Call 911**
   Request ambulance with epinephrine.

   **Consider Additional Meds**
   (After epinephrine):
   - Antihistamine
   - Inhaler (bronchodilator) if asthma

   **Positioning**
   Lay the person flat and raise legs. If breathing is difficult or they are vomiting, let them sit up or lie on their side.

   **Next Steps**
   - If symptoms do not improve, or symptoms return, more doses of epinephrine can be given about 5 minutes or more after the last dose.
   - Transport to and remain in ER for at least 4 hours because symptoms may return.

**MILD SYMPTOM**

1. **NOSE:** Itchy or runny nose, sneezing
2. **MOUTH:** Itchy mouth
3. **SKIN:** A few hives, mild itch
4. **GUT:** Mild nausea or discomfort

Do not depend on antihistamines. When in doubt, give epinephrine and call 911.

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Accidents happen...if one occurs

Follow the Food Allergy Emergency Action Plan prescribed by licensed health care provider!

• Take all symptoms seriously
• Follow your institution’s policy
• Do NOT delay in giving epinephrine when required
• Call 911
Illinois Undesignated Emergency Epinephrine Act

- Signed Aug. 15, 2011
- Now allows for expanded availability in schools, churches, gyms, restaurants (any public arena)
- Mandated in 12 states....Illinois coming soon
- Allows ANY trained staff at the facility to use undesignated prescribed epinephrine to ANY person on the property, regardless of history or presence of action plan, WITHOUT liability
- Saving LOTS of lives!!
- East Central Illinois = 85 schools, gyms, churches
- IS YOUR COMMUNITY PROTECTED?
Carle Food Allergy Education Program

- Provide educational opportunities and act as a resource to healthcare providers in our area. (through conferences, website, etc.)
- Provide free community education to schools, daycare centers, camps, etc.
- Assist with Emergency Epinephrine Act in Schools
- Local Support Group CIFAST (www.cu-foodallergy.org)
Thank you, IEHA!
Food Allergy Resources

● Foodallergy.org: Resource for up to date food allergy information, research, and education.

● IDPH Food Handling Regulation Enforcement Act for restaurants http://www.dph.illinois.gov/topics-services/food-safety/allergen-awareness

● Snacksafely.com: Lists snacks that are safe and do not contain the top 8 allergens.