# ALLERGENS

## Why all the fuss?

CHIRAG BHATT Director, Regulatory Affairs





## Agenda

- What is?
- Why all the fuss?
- Solutions
- Allergen Control
- Q&A



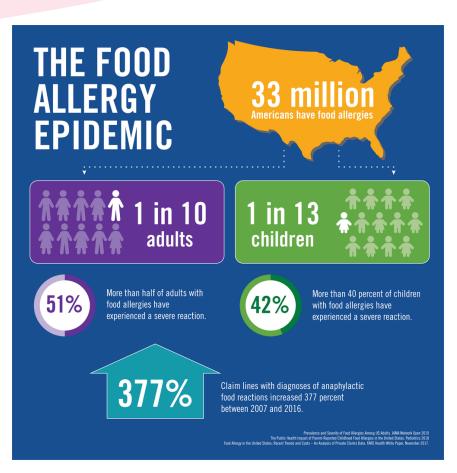
## What is?

- MEDICAL CONDITION
- Exposure triggers harmful immune response
- Allergens are PROTEINS
- Mild to severe reaction (itchy to breathing)
- Anaphylaxis serious and sudden
- Wheezing, shortness of breath, dizziness, paleness, tight throat, tongue/lips swelling, hives
- 30,000 ER visits, 2,000 hospitalized, 150 deaths

- 33 million Americans
- Children (<18) 5.6 million
- 40% children allergic to more than 1
- Shellfish 24%, Dairy+Peanuts 36%



## What is?



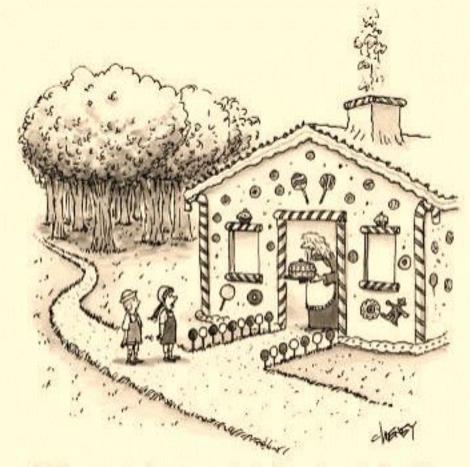
- FDA Risk Factor Study (2016 data) indicated that 70% PIC did NOT identify major allergens and related symptoms
- High number of food recalls
- Allergens Top food safety concern
- 2004: FALCPA act labeling requirements
- Food allergen awareness training

#### TOP REASON FOR UNDECLARED ALLERGEN RECALLS AND PUBLIC HEALTH ALERTS:

#### LOSS OF CONTROL DURING PACKAGING AND LABELING

- Recalls due to undeclared allergenic foods.
- FDA issues firm press releases that list the most significant product action in the last 60 days, based on extent of distribution and the degree of health risk.
- Many food allergen recalls are included in these alerts and will eventually appear in an Enforcement Report.





"Before we come in, was any part of your home produced in a facility that also handles wheat, milk, nuts, eggs, or soy?"

## What is?

- 70% of the total public health alerts and recalls were due to loss of control during the packaging and labeling processes.
- 15% of the <u>mislabeling problems</u> were from inadequate label approval.
- Remaining ones were from allergen cross contact during processing or from supplier failing to disclose specific allergen.
- Wrong packaging, wrong description (butter vs dairy), computer errors, or imported from other country
- 25% of these could have been avoided
- cGMPs, Preventive Controls, HACCP not effective or not in place



#### **Allergen Control Plan**

- **Product Design (Research and Development)**
- Segregation of Foods or Ingredients Receiving, Storage, Handling and Processing
- Supplier Control Programs for Ingredients and Labels
- Prevention of Cross-Contact During Processing
- Product Label Review & Label/Packaging Usage and Control
- Validated Allergen Cleaning Program
- Staff Training and Education

Keywords: Menu design and changes, receiving and storage (know the allergens), supplier has a plan, separate storage (when possible), dedicated utensils – equipment – containers, re-use and re-work of items/ingredients, color-coded, designated time/area, effective sanitation, adequate engineering/design, packaging and labeling accuracy and verification, facility design, SOPs, cleaning validation and verification, general and role specific training for everyone (and refreshers).



## Label

#### Example 1:

Ingredients: Whey protein (milk), lecithin (soy), cherry, sugar, natural flavors (almond), salt.

#### Example 2:

Ingredients: Whey protein, lecithin, cherry, sugar, natural flavors, salt. **Contains: Milk, soy, and almond.**  Food label - identify the food source of all major food allergens used to make the food. This requirement is met if the common or usual name of an ingredient already identifies that allergen's food source name (for example, buttermilk). OR the allergen's food source must be declared at least once on the food label in one of two ways.

1. In parentheses following the name of the ingredient.

e.g. "lecithin (soy)," "flour (wheat)," and "whey (milk)"

-OR-

2. Immediately after or next to the list of ingredients in a "contains" statement.

e.g. "Contains Wheat, Milk, and Soy."





#### **Allergen Controls in Manufacturing**

Jen Fernan, Director, FSQA & Regulatory



## **Allergens – Accurately labeled**

- Must ensure allergens are accurately labeled
- Two major causes for undeclared allergens:
  - Incorrect labels used
  - Cross-contact from allergens in production





# **Ensuring Correct** Labels





## Labels/Packaging

- <u>Secure</u> HOLD upon receipt
- Approved prior to using in production
- Match schedule / batching sheet / label code
- Designated frequency
- Rework processes must be considered
- Documented process / verified
- Affix labels / packaging to records
- Line clearance protocols after run
- Verifications





# Preventing Cross-Contact





## **Identifying Allergens**

#### Allergenic Ingredient List

#### **Allergen Register**

Form F-089 Revision: 15 Date: 7.28.2022

Reason: Updated Ingredients

|            |          |             |                   | Food Allergens in Ingredient Formulation |       |      |       |                      |        |                        |        |          |
|------------|----------|-------------|-------------------|--|-------|------|-------|----------------------|--------|------------------------|--------|----------|
|            | Supplier | Item Code 💌 | Raw Material Name | Wheat 🚽                                  | Soy 🚽 | Milk | Egg 👻 | Treenu⁺ <sub>▼</sub> | Pean 🛫 | Shellfish <sub>👻</sub> | Fish 🖵 | Sesame 🚽 |
| Supplier A |          | 000-1234    | Ingredient A      | Х  | Х     | Х    | Х     |                      |        |                        |        |          |
| Supplier A |          | 000-1235    | Ingredient B      | Х  | Х     | Х    | Х     |                      |        |                        |        |          |
| Supplier A |          | 000-1236    | Ingredient C      | Х  | Х     | Х    | Х     |                      |        |                        |        |          |
| Supplier A |          | 000-1237    | Ingredient D      | x  | Х     | Х    | Х     |                      |        |                        |        |          |
| Supplier A |          | 000-1238    | Ingredient E      | X  | Х     | Х    | х     |                      |        |                        |        |          |





## **Identifying Allergens**

#### Allergenic Finished Goods List

**Finished Product Allergen Register** 

Revision: 05 Date Issued: 2/23/2023

| Lines | Name of Product<br>্য | Countries Product Shipped To | Wheat<br>~ | Soy<br>Ţ | Milk<br>_ | Egg | Treenut | Peanut<br>Ţ | Shellfish<br>_ | Fish<br>▼ | Sesame<br>▼ | Allergen Label Statement 🖃     |
|-------|-----------------------|------------------------------|------------|----------|-----------|-----|---------|-------------|----------------|-----------|-------------|--------------------------------|
| X     | Product A             | US                           | Х          | Х        | Х         | Х   |         |             |                |           |             | Contains Wheat, Soy, Milk, Egg |
| X     | Product B             | US                           | Х          | Х        | Х         | Х   |         |             |                |           |             | Contains Wheat, Soy, Milk, Egg |
| X     | Product C             | US                           | Х          | Х        | Х         | Х   |         |             |                |           |             | Contains Wheat, Soy, Milk, Egg |
| X     | Product D             | US                           | X          | X        | X         | Х   |         |             |                |           |             | Contains Wheat, Soy, Milk, Egg |





## **Receiving Controls**

#### Verification of Allergenic Ingredients

|            |           |                   |           |       | Fo     | od Aller |
|------------|-----------|-------------------|-----------|-------|--------|----------|
| Supplier   | Itom Code | Raw Material Name | Ţ Wheat Ţ | Soy 👻 | Milk 👻 | Egg      |
| Supplier A | 000-1234  | Ingredient A      | х         | Х     | Х      | Х        |
| Supplier A | 000-1235  | Ingredient B      | Х         | Х     | Х      | Х        |
| Supplier A | 000-1236  | Ingredient C      | х         | Х     | Х      | Х        |
| Supplier A | 000-1237  | Ingredient D      | х         | Х     | Х      | Х        |
| Supplier A | 000-1238  | Ingredient E      | Х         | Х     | Х      | Х        |

#### INGREDIENTS: WHEAT STARCH, YELLOW CORN FLOUR, SODIUM CASEINATE (MILK), EGGS, SOYBEAN OIL, CONTAINS 2% OR LESS OF: ARTIFICIAL FLAVOR, CINNAMON, EGG WHITES, EGG YOLKS, GUAR GUM, LEAVENING (BAKING SODA, SODIUM ACID PYROPHOSPHATE), MONO- AND DIGLYCERIDES, PROPYLENE GLYCOL MONO- AND DIESTERS OF FATTY ACIDS, SALT, SOY LECITHIN, SUGAR

SNACK FOOD



## **Receiving Controls**

- Trailer Inspection
  - Signs of spillage/damaged ingredients

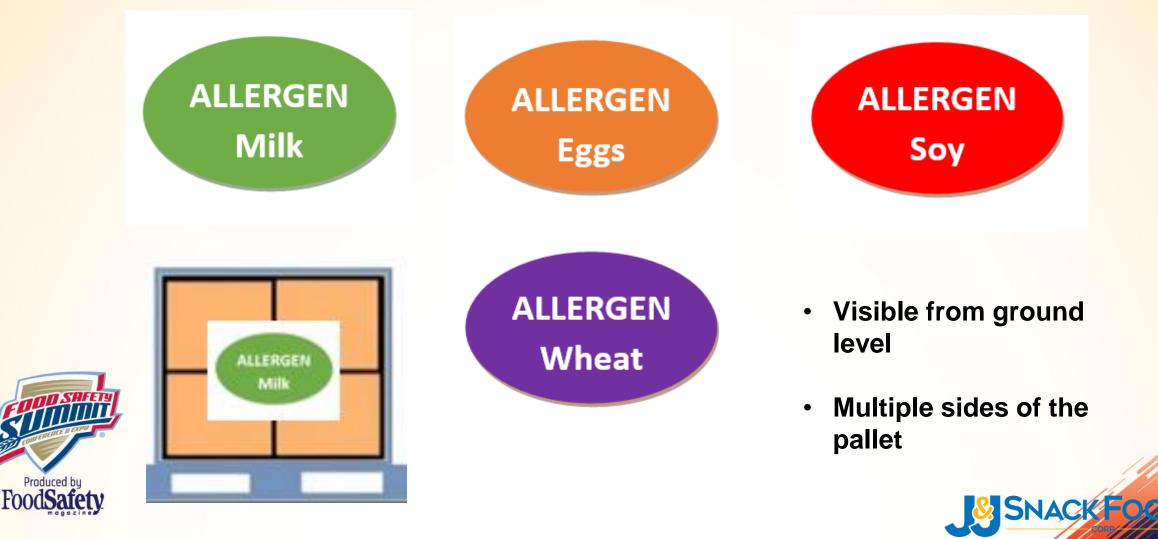
SNACK FOOD

Procedure if signs of cross-contact

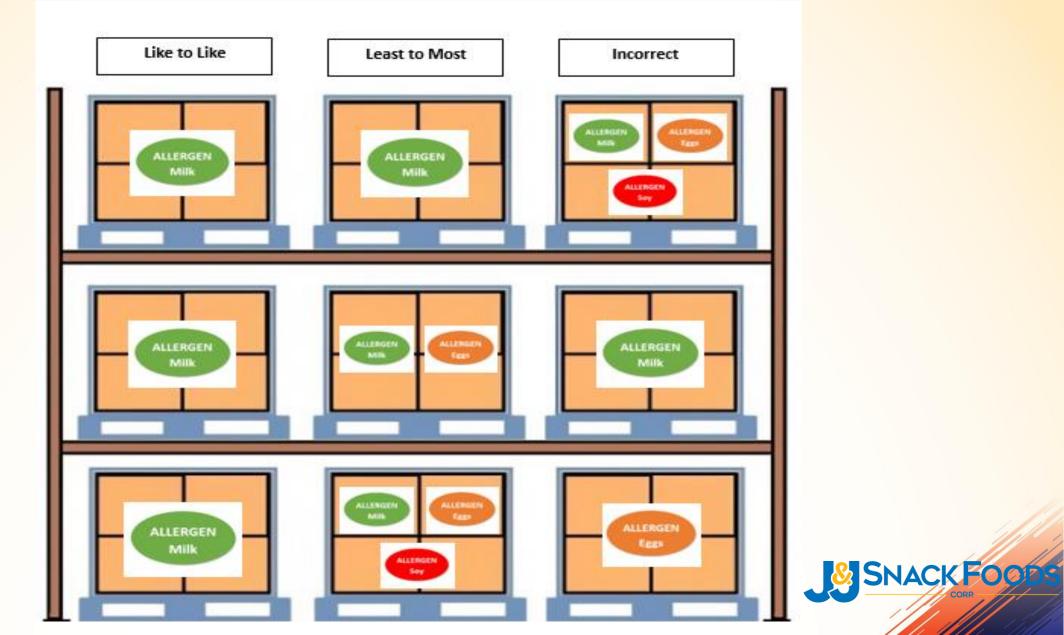


### **Storage Controls**

#### System for labeling allergenic ingredients

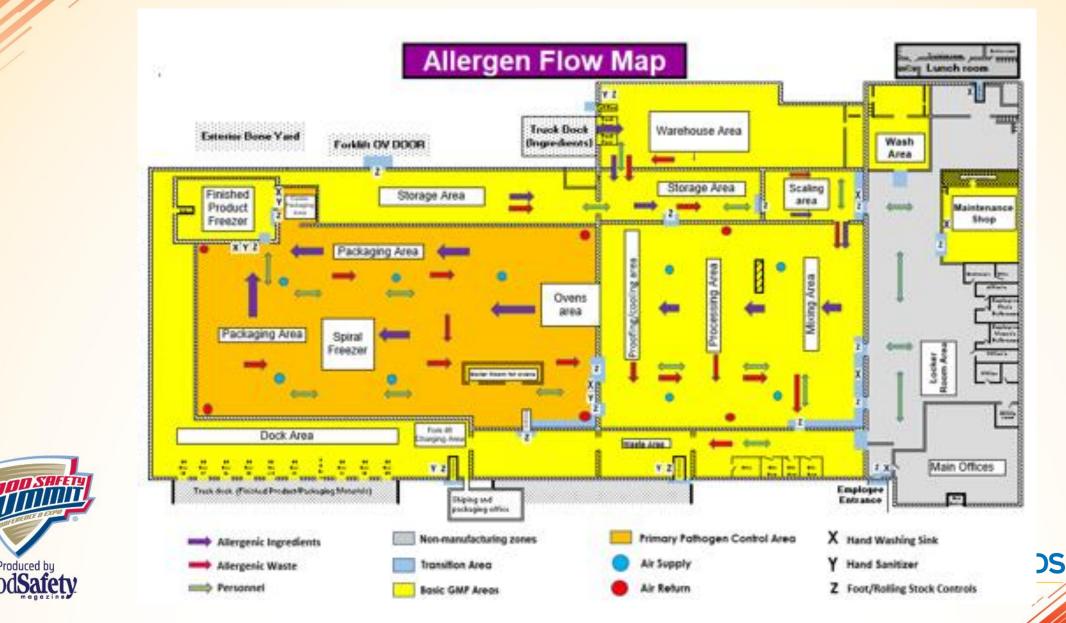


### **Storage Controls**





## **Equipment and Facility Controls**



FoodSafety

## **Equipment and Facility Controls**

- Equipment Crossovers
  - Shields/catch pans/tarps
- People Crossovers
  - Dedicated personnel
  - Color coded smocks





## **Handling Controls**

- Allergen spills
  - Procedures for isolating and cleaning
  - Dedicated tools to clean
- Rework
  - Like to Like
  - Stored separate from non-allergen rework
- Holds



Segregated from non-allergen holds



#### **Tools/Utensils/Containers Controls**

#### Color Coding/Labeling







Red - Soy



**Purple - Wheat** 



#### **Product Scheduling Controls** Progressive Scheduling **ALLERGEN** Wheat ALLERGEN Wheat **ALLERGEN** ALLERGEN Milk Wheat **ALLERGEN** Milk **ALLERGEN** Eggs Produced by NACK FOODS

### **Changeover Controls**

#### Changeover Matrix

| Line                  | Leading Product<br>Right | Item A | Item B | Item C | Item D | Item E |
|-----------------------|--------------------------|--------|--------|--------|--------|--------|
| Trailing Product Down | Allergens                | none   | W      | WM     | WMS    | WMSE   |
| Item A                | none                     | 1, 2   | 3      | 3      | 3      | 3      |
| Item B                | W                        | 1,2    | 1, 2   | 3      | 3      | 3      |
| Item C                | WM                       | 1,2    | 1, 2   | 1, 2   | 3      | 3      |
| Item D                | WMS                      | 1,2    | 1, 2   | 1, 2   | 1, 2   | 3      |
| Item E                | М                        | 1, 2   | 3      | 3      | 3      | 3      |

W = Wheat, M = Milk, S = Soy, E = Egg

- 1: Running change; no cleaning required.
- 2: Run system empty, line clearance, flush product through line.
- 3: Tooling change, complete system cleanout, and flush required.





## **Changeover Controls**

- Line Clearance Procedure
  - Previous Product
    - ingredients removed from the line
    - inspect line to ensure no product remains
    - packaging removed from line; including rework areas
  - Next Product
    - correct ingredients and packaging staged





### Communication

- Training
  - Allergens controlled in plant
  - Controls in place to prevent cross-contact
- Lines where allergens are running
  - Schedule
  - Signage





#### Communication

#### Color Code Signage

Produced

|  |                         |                    | Color Coding Map                                     |                   |              |  |            |          |                    |                                |  |                                     |  |  |
|--|-------------------------|--------------------|--|-------------------|--------------|--|------------|----------|--------------------|--------------------------------|--|-------------------------------------|--|--|
|  |                         | Color<br>(English) | Containers/<br>Barrels/<br>bins/totes                | Knife/Blades      | Buckets/lids | Scoops   | Scrapers   | Brushes  | Brooms<br>(*Floor) | Dust pan<br>(*Floor)           | Mops (*Floor)<br>Squeegees (*see<br>each area use)       | Shovels (*see<br>each area use)     |  |  |
|  |                         |                    | Contenedores/<br>Barrile/<br>contenedores/<br>bolsas | Cuchillo/Cuchilla | Cubos/tapas  | Cucharadas   | Raspadores | Cepillos | Escobas<br>(*Piso) | Bandeja de<br>polvo<br>(*Piso) | Fregonas (*Piso)<br>Squeegees (*Ver<br>cada área de uso) | Palas (*Ver<br>cada área de<br>uso) |  |  |
| Allergen<br>Handling<br>Tools<br>Herramienta<br>de manejo d<br>alérgenos |                         | Red<br>Rojo        | NA   | NA                | NA           | Soy Allergen<br>Scoop<br>(Ingredient)<br>Cucharada de<br>alérgenos de<br>soja<br>(ingrediente) | NA         | NA       | NA                 | NA                             | NA   | NA                                  |  |  |
| Allergen<br>Handling<br>Tools<br>Herramienta<br>de manejo d<br>alérgenos | Wheat<br>s (Trigo)<br>e | Purple<br>Morado   | NA   | NA                | NA           | Wheat Allergen<br>Scoop<br>(Ingredient)<br>Cucharada de<br>alérgeno de trigo<br>(ingrediente)  | NA         | NA       | NA                 | NA                             | NA   | NA                                  |  |  |

## **Auditing/Validation**

- Are the controls being followed?
- Are they effective?

| Storage Assessment  | Circl | e One | Corrective Action |
|---|-------|-------|-------------------|
| Ingredients identified with allergen labeling   | Yes   | No    |                   |
| Allergen stored below non-allergens   | Yes   | No    |                   |
| Allergens of different kinds are not stored above each other (i.e., Walnuts are not stored on | Yes   | No    |                   |
| top of Pecans)  |       |       |                   |
| Allergen containing ingredient spills are not observed and/or are properly cleaned up         | Yes   | No    |                   |
| according to work instructions.   |       |       |                   |
| Processing Assessment   | Yes   | No    |                   |
| Allergen tools are used for weighing ingredients  | Yes   | No    |                   |
| Allergens being weighed are segregated from non-allergens and are labeled                     | Yes   | No    |                   |
| Allergen rework labeled   | Yes   | No    |                   |
| Allergen label/packaging being verified as described in procedure                             | Yes   | No    |                   |
| Allergen changeover/clean down being conducted as described in procedure                      | Yes   | No    |                   |
| Personnel Assessment  | Yes   | No    |                   |
| Personnel handling allergens are trained  | Yes   | No    |                   |
| Personnel handling allergens are aware of allergen running and appropriate precautions to     | Yes   | No    |                   |
| be taken when handling allergens  |       |       |                   |

Allergen Management Assessment Example





## Thank you!





## Wendy's

- ≥ 7250 restaurants
- 33 countries worldwide
- $\geq$  95% Franchisees
- Wendy's and our franchisees employ over 240,000 people
- 70% of which are Millennials or younger
- 10 Languages spoken in our restaurants



#### Allergen RISK in Foodservice

#### Worldwide

- ~220 million people suffer food allergies
- ~ 2%–10% of the population
- Causes 1 death per 50
  million people a year

#### In US

- 32 million people suffer food allergies
- ~ 11 % of people age 18 or older
- About <u>8% of children</u> (1 of 13 children)



#### Top 10 Allergen Challenges

- Allergen identification in Ingredients
- Different Sources or Suppliers for SAME Product
- Space (storage & prep)
- Cross-Contamination
- Menu & Menu changes
- Food Handlers
- Time
- Cleaning and Sanitizing
- Allergen Knowledge



### **Best Practices**

- Supply Management
- Operational Allergen Controls:
  - Identification and separation of storage and use;
  - cross-contact areas & equipment;
  - Risk assessment for new products and/or menus
- Risk assessment prior to approval of procedural changes or equipment that may introduce allergens
- CLEAR Identification to Customers
- Employee Allergen Training to includer major food allergens and what to do in case of an allergic reaction





## Protecting our Customers





SUPPLIER CODES OF PRACTICE

- Commitment to our values drives our decisions
- Our role as a Retailer and a Manufacturer
- Our Wegmans Brand has equity with our Customers
- Strong Codes of Practice and PLA provide a standard

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Make it easy to select a variety of foods that meet your specific needs and preferences.



These easy-to-recognize "dots" on our Wegmans Brand products and recipes show you at a glance how each food helps you meet your health and wellness goals.

Each Wellness Key alerts you to important nutritional information. Some are for everyone, like Heart Healthy or High Fiber, while others, like Gluten Free or Lactose Free, are meant for people with specific dietary needs.

This guide explains exactly what each Wellness Key means. Keep it handy for your meal planning and shopping.

#### **Look for Wellness Keys here:**

- Wegmans Brand product packaging
- wegmans.com
- Wegmans recipe cards
- Wegmans App





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#### Wegmans Wellness Keys

GLUTEN FREE Ingredients are not derived from wheat, rye, barley or oats, and the final product must have <20 ppm gluten from unavoidable gluten present due to inadvertent cross contact. Used on products and recipes.



Ingredients not derived from wheat, rye or barley. Contains certified glutenfree oats. The final product must have <20 ppm gluten from unavoidable gluten present due to inadvertent cross contact. Used on products.



No ingredients have been derived from animals, including meat, fish, dairy, eggs, honey, or anything made from these. For example, a noodle made with eggs would not be vegan. Used on products and recipes.



Less than 3g fat per serving of individual foods. Used on products and recipes.



Less than 140mg sodium per serving of individual foods. Used on products and recipes.



Contains or may contain (we specify which of the following) Crustacean Shellfish, Eggs, Fish, Milk, Peanuts, Soy, Tree Nuts, Wheat.

Note: The allergen key is only used on Wegmans Brand packaged products, not on recipes. It appears on the back or side panel near the ingredient statement.



Ingredients do not contain lactose, the natural sugar found in milk. Used on products and recipes.



Both keys indicate how a serving of the recipe or product counts toward your goal of 3 servings of whole-grain foods each day. Used on products and recipes.



Ingredients support a Paleo style of eating. Foods typically allowed include meat, fish, shellfish, poultry, eggs, vegetables, fruits, nuts, and seeds. Foods typically not allowed include grains, potatoes, milk and dairy products, beans, and peas. Used on products and recipes.

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Must contain at least 5g fiber per serving of individual foods. Used on products and recipes.



Must contain at least 20% of the daily value for calcium (260mg) per serving of individual foods. Used on products and recipes.



Low in fat and no more than 1g saturated fat, 480mg sodium, and 60mg cholesterol per standard serving of an individual food. Contains at least 10% of the daily value for one of the following: protein, dietary fiber, vitamin D, calcium, iron or potassium. Used on products and recipes.

Note: "Meal-type products" contain a combination of servings from two or more food groups. These products have different nutritional criteria than servings of individual foods. Single proteins (meat, poultry, game, and seafood) also have different nutritional criteria.

## Training and Support

- Signage
- Computer Based Interactive Training
  - Overall Food Safety
  - Allergen Training
  - Advanced Training for Managers
- HACCP Training for Leaders
- Job Aides for all In-Store Produced Items
- Food Safety Support Team (Company Wide Teams)
  - Food Safety Trainers
  - Assessors and Auditors
  - SSOP Coordinator
  - Food Scientists





# **Training and** Support

140+ Store Food Safety Coordinators and Specialists

This role identifies, educates, coaches and provides training on food safety issues that may cause illness or injury to employees and customers. You'll be the subject-matter expert in your store and work hands-on with employees to build trusting relationships, understand daily operations and suggest modifications to work processes, equipment, and the environment to reduce risk factors and ensure company policies and procedures are followed.



#### **Food Allergies**

#### If a Customer Says They Have a Food Allergy

- Take it seriously. Allergic reactions can be life-
- · Be ready to discuss ingredients and food preparation with the customer
- Communicate the allergy to the kitchen staff. . Let the customer know when you are unsure if a menu
- item contains the food allergen.
- Always let the customer make their own informer

#### Prevent Cross-Contact

Keep allergen-containing foods separate from other

 Avoid shortcuts, such as picking nuts out of a salad. Even a tiny amount of an allergen can cause a severe and potentially life-threatening reaction.

· Consider all sources of cross-contact, such as shared surfaces, fryer oils, and cooking splatter.

#### Before Preparing Allergy-free Foods

· Wash, rinse, and sanitize, or change: utensils, cutting boards, and food-contact surfaces. · Wash your hands and change gloves

#### If a customer has an allergic reaction, call 9-1-1







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