



**DIVISION OF AGRICULTURE
RESEARCH & EXTENSION**

University of Arkansas System

FOOD INDUSTRY CONCEPTS

Labeling Food Allergens

Food allergies affect as many as 15 million Americans each year (FARE, 2015). The Food and Drug Administration points out that there is no cure for a food allergy and the only way to protect against an allergy attack is to avoid the allergen entirely (FDA, 2015).

In order to protect themselves or family members from the effects of food allergies, many consumers are carefully considering the choices they make when selecting food. Providing the public with the proper information to make these choices is an important consideration when placing food on the market.

What Is A Food Allergy?

A food allergy is a reaction of the body's immune system to a specific protein in a food. Usually within about an hour of eating the food containing the allergen, there is an immune response in the body causing symptoms such as

- hives, itching, or skin rashes,
- swelling of the tongue, lips, face, and throat,
- wheezing, nasal congestion or trouble breathing
- abdominal pain, diarrhea, nausea, or vomiting

- dizziness, lightheadedness, or fainting.

For most people the effects of a food allergy are mild. However, some food allergies can cause severe reactions. Severe allergic reactions, called anaphylaxis, may lead to extreme versions of these symptoms and even more life-threatening effects such as

- shock
- a severe drop in blood pressure
- rapid, irregular pulse
- loss of consciousness

A food allergy should not be confused with a food intolerance or other non-allergic food reaction. A food intolerance is an abnormal response to a food or additive but it does not involve the immune system. For example, people who experience gastrointestinal discomfort when they drink milk may think they are allergic to milk when they are actually experiencing intolerance to some component of the milk, like lactose. Generally, food intolerances lead to discomfort while food allergies may lead to much greater health effects and may even be life-threatening.

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Figure 1. The eight major food allergens pictured account for 90% of all food allergies. The presence of these allergens in a food must be identified on food labels.



Labeling of Food Allergens

The Food Allergen Labeling and Consumer Protection Act (FLACPA) that went into effect in 2006 is a comprehensive amendment to the Federal Food, Drug, and Cosmetic Act. FLACPA requires that the label of a food that contains an ingredient that is or contains protein from a “major food allergen” declare the presence of the allergen.

FALCPA identifies eight foods or food groups as major food allergens (Figure 1). Although these foods/food groups are not the only foods that have been identified as causing allergic reactions in people, they account for over 90% of all documented food allergies. These foods/food groups are:

- milk
- eggs
- peanuts
- tree nuts such as almonds, walnuts, and pecans
- soybeans
- wheat
- fish
- shellfish such as crab, lobster, and shrimp

There are two different ways the major food allergens may be identified on a food label (Figure 2):

- The first is to include the name of the allergen source in the ingredient list. If the common name of the ingredient clearly identifies the potential allergen (for example, buttermilk is clearly a milk product) then the labeling requirement is met. However, if the allergen source is not clear from an ingredient's name, then the allergen's food source must be identified. In

the ingredient list this may be done by placing the food source of the ingredient in parenthesis after the common or usual name of an ingredient if the name of the food source of the allergen does not appear somewhere else in the ingredient list. So, for example whey as an ingredient, would be identified in the ingredient list as “whey (milk)”

- The second option is to place the word “Contains” followed by the name of the allergen food source(s) immediately after or adjacent to the list of ingredients. So for our whey example above, instead of placing milk in parenthesis in the ingredient list, the ingredient list could be followed by the statement “Contains milk.” The use of bold type for this statement is optional but the type size for this statement cannot be any smaller than the type size for the list of ingredients. If a “Contains” statement is used on a food label, it must include the names of the food sources of all major allergens in the food, even if they are also identified in the ingredient list.

Since there are several types of tree nuts, fish, and shellfish and an allergy may be for a specific type, FALCPA requires the specific type of these potential allergens be stated. This means it is not adequate to say “contains tree nuts” and instead the specific type of nut must be stated. For example “Contains almonds.”

Cross Contact

Cross contact is the unintentional introduction of an allergen into a product. Although cross contact may occur during harvesting, transportation, manufac-

turing, processing, or storage, it most often is the result of processing or handling foods in a facility where foods containing allergens were also processed or handled. Cross contact may occur due to the use of the same processing line, as the result of ineffective cleaning, or from the generation of dust or aerosols containing an allergen.

Food manufacturers may try to prevent cross contact by producing allergen free products in facilities separate from those where products containing allergens were produced or by dedicating certain processing lines to allergen-free production. Although advisory statements such as “Produced in a plant that processes nuts” or “May contain nuts” are sometimes placed on labels to alert consumers to the possibility of cross contact, use of such statements should not be used as a substitute for good manufacturing practices.

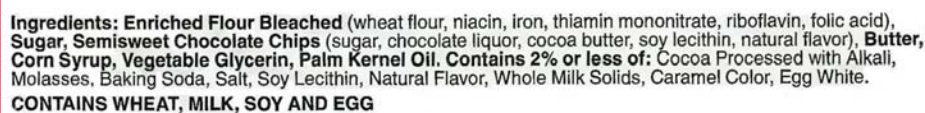
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Figure 2. Sample label showing the two methods of listing allergens.



Ingredients: Enriched Flour Bleached (wheat flour, niacin, iron, thiamin mononitrate, riboflavin, folic acid), **Sugar, Semisweet Chocolate Chips** (sugar, chocolate liquor, cocoa butter, soy lecithin, natural flavor), **Butter, Corn Syrup, Vegetable Glycerin, Palm Kernel Oil. Contains 2% or less of:** Cocoa Processed with Alkali, Molasses, Baking Soda, Salt, Soy Lecithin, Natural Flavor, Whole Milk Solids, Caramel Color, Egg White.
CONTAINS WHEAT, MILK, SOY AND EGG

This publication was prepared by the Arkansas Food Innovation Center (AFIC) as an outreach to entrepreneurs. Funding for the preparation of this material was provided in part by grants from the U.S. Department of Agriculture, Arkansas Agriculture Department and the Southern Extension Risk Management program.

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