What’s in a label?

Berber Vlieg-Boerstra, PhD RD

Declaration of priority allergenic foods or ingredients.

For allergic consumers label reading should be a way of life and they are strongly recommended to read the entire label, every time they purchase and eat a pre-packaged food. This recommendation holds, even if these foods are familiar to them, because ingredients may be changed by the manufacturer without warning.

In the USA, the FALCPA, the Food Allergen Labeling and Consumer Protection Act of the FDA, requires that eight priority allergenic foods be declared on the label of a food that contains these foods or ingredients derived from these foods.

FALCPA took effect in 2006 and is meant to improve food label information for allergic consumers. FALCPA applies to both domestically manufactured and imported packaged foods that are subject to FDA regulation, including infant formulas, dietary supplements and medical foods.

The eight priority allergenic foods are milk, eggs, fish (specified to type e.g., bass, flounder, cod), crustacean shellfish (specified to type, e.g., crab, lobster, shrimp), tree nuts (specified to type e.g., almonds, walnuts, pecans), peanuts, wheat, and soybeans. Other allergenic foods that are not considered priority do not need to be fully disclosed on the label, and may be included in a vague ingredient term such as spice or flavoring.

Priority allergenic foods in the EU that should be labeled include these, as well as sulphite, sesame, mustard, celery, lupin and molluscs. In addition to wheat, all gluten containing grains such as barley, rye and spelt should be declared (14 allergenic foods have been declared in the EU, since 2011).

Priority allergenic foods in Canada include the US priority allergenic foods as well as mustard, sulphite and sesame.

The priority allergenic foods must be labeled in clear, commonly used wording in one of three ways:

- in the ingredient statement such as wheat flour, egg, milk;
- in the ingredient statement in parenthesis following the scientific or non-specific ingredient name of the allergenic food such as flour (wheat), egg and butter (milk);

or

- in a “contains” statement after the ingredient list. The word "contains" is followed by the common name of the priority allergenic food For example: Contains Wheat, Milk, Egg.

Label information sheets can be obtained through the FARE website, http://www.foodallergy.org/food-labels

FALCPA only applies to packaged FDA-regulated foods. FALCPA’s labeling requirements do not apply to foods served in restaurants and that are placed in a wrapper or container in response to a consumer’s order, such as the paper or box used to provide a sandwich ordered by a consumer.
Nutrition facts

Proteins listed under nutrition facts apply to the total amount of proteins from all ingredients in the food and are not an indication of the amount allergenic proteins.

Cross-contact and “may contain” confusion

Cross-contact is the inadvertent introduction of an allergenic ingredient into a product. It is generally the result of environmental exposure during processing or handling, which may occur when multiple foods are produced in the same facility. It may occur due to use of the same processing line or equipment, through the misuse of rework, as the result of ineffective cleaning, or from the generation of dust or aerosols containing an allergenic ingredient.

Advisory statements or precautionary labeling are not required by FALCPA and are used on a voluntary basis by the manufacturer. Manufacturers use many different wordings for advisory statements, such as but not limited to “may contain…”, “may contain traces of…”, “made in a facility that also produces…”. There are many misinterpretations about advisory statements:

- Consumers think that advisory statements are obligatory; they are not required.
- Consumers incorrectly believe that the specific wordings are associated with different risk levels; they are not.
- Consumers may think that the word “trace” signifies a low risk due to very low amounts.

The US food allergy guidelines suggests food allergic consumers avoid foods with advisory statements, although the choice of products is reduced heavily in doing so. In the US, approximately 17% of pre-packaged foods carry an advisory statement. These statements are concentrated in the categories of chocolate candies (53%) and cookies (53%), and are predominately related to nuts (61%) and peanuts (48%). (Pieretti MM et al, 2009).

When consuming these foods there is a small but real risk that some allergic consumers will experience an allergic reaction(Hefle SL et al, 2007; Ford LS et al, 2010), although most foods bearing advisory statements do not contain detectable amounts of the allergenic ingredient listed in the precautionary label (Hefle SL et al, 2007; Ford LS et al, 2010) and most contamination is low-level (except milk) and is below the threshold level for most patients. (Ford LS et al, 2010).

High risk foods for contamination, in which residues of allergenic foods are frequently detected in higher amounts are, amongst others: dark chocolate (risk of contamination with milk; Crotty and Taylor, 2010), chocolate cookies and candies (risk of contamination with hazelnut and peanut).

A recent study showed that peanut was found in 8.6% of products with peanut advisory statements, similar to a study of 2005 (Remington B et al, 2013), specifically in nutrition bars (25%) and candy/confectionery, thus putting peanut allergic patients at risk.

Counseling patients to avoid foods with advisory statements remains important, as studies have shown that an increasing number of patients ignore advisory statements. A Canadian study showed that 8.3% of inadvertent reactions to food was due to ignoring advisory statements (Shett S et al, 2010).
Also of note, 1.9% of prepackaged foods tested without advisory labels contained residues of priority allergenic ingredients (Ford LS et al, 2010), particularly from smaller companies and within the higher-risk products (Ford LS et al, 2010). Thus, highly sensitive patients should be extra careful with pre-packaged foods. Also patient-related factors should be weighed when deciding to use pre-packaged foods: have emergency-medication at hand, avoid these foods in remote places far from medical help, avoid pre-packaged foods when asthma is not well-controlled or if not feeling well, or when using alcohol.

The FDA has not established safe thresholds for the priority allergenic foods, so no established guidance for safe levels exist so far. Currently, quantitative risk assessment models have been developed, aimed at reducing the number of advisory statements, expanding choices for consumers and reducing the potential for allergic reactions from packaged foods by making advisory labels more meaningful (Remington 2013.)

What else does the ingredient list tell us?

Foods are listed in descending order, but not often allow for exact computing of the amount of priority allergenic ingredient in the food.