

Food, Glorious Food

Nanette B. Silverberg, MD

The Food Allergen Labeling and Consumer Protection Act of 2004 states that approximately 2% of adults and 5% of infants and young children in the United States have food allergies,¹ though it seems a gross underestimate based on the prevalence I see in my New York patients. The act categorizes 8 major foods and food groups that account for 90% of all food allergies—milk, eggs, fish, crustacean shellfish, tree nuts, peanuts, wheat, and soybeans—and requires the labeling of all food substances that contain ingredients from these allergen categories.¹ Although abbreviated here, the labeling guidelines apply to all food products that contain the allergens in question as well as their protein derivatives, exempting any highly refined oils derived from the foods specified. As a result, this act has greatly eased the burden of label reading for individuals with food allergies and their family members, allowing them to go shopping in supermarkets without bringing home surprise allergens. However, many food-allergic individuals are unaware that over-the-counter skin care products may contain food extracts.

What about skin care products containing food additives?

Skin care products currently are not required to list food allergens on their labels by any act of Congress or the US Food and Drug Administration. In the past, no labeling requirements have been included with monograph data, and many food additives do not have specific monographs for topical usage.

What are the data on reactions to skin contact with food allergens?

Allergic reactions caused by topical contact with food-based agents are widely reported, including IgE-mediated rapid responses such as pruritus, hives, and anaphylaxis (immediate contact reactions),²⁻⁵ and

delayed hypersensitivity reactions (delayed contact reactions).^{4,6} One major culprit in cutaneous contact allergies that causes systemic allergic reactions is peanuts, especially crude peanut oil, which contains high amounts of the peanut protein.⁷ Peanut-based products, particularly ones containing flour derivatives, are notably allergenic when the peanut protein is present in the product.⁸ However, there are peanut oil products on the market from which both the protein and agglutinin are extracted through a refinement process; one such agent has been investigated via a prick test in individuals with peanut allergies and has not been found to induce allergic responses.⁹ Skin care products containing milk, fish, crustacean shellfish, tree nuts, and wheat should be easy to label, while labeling soy products may be more challenging because it is difficult to know which portion of the soy extract is allergenic.

What needs to be done?

In my opinion, a schema of labeling needs to be developed for all skin care products that contain derivatives from foods in the top 8 allergen categories as described by Congress. Codreanu et al⁴ stated, “A clear and accurate identification of food allergens in cosmetics and topical agents is necessary,” and I agree. For instance, the labeling on peanut oil products from which the peanut protein and agglutinin have been extracted might read PAF (or protein and agglutinin free). Peanut-based agents that do contain the allergenic components should be labeled similar to food products (eg, Allergy Information: This product contains peanuts), which would allow individuals with food allergies and their family members to read labels on skin care products just as they would on foods.

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From the Department of Dermatology, St. Luke's-Roosevelt Hospital Center, New York, New York; Beth Israel Medical Center, New York; and Columbia University College of Physicians and Surgeons, New York.

Dr. Silverberg is a consultant for Johnson & Johnson and an investigator for Laboratoires Expanscience.

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