American Latex Allergy Association

Cross Reactive Food

A compilation from the literature contributed by Tom Grier

Allergic reactions to natural rubber latex comprise both delayed and immediate (IgE-mediated) hypersensitivities, producing clinical symptoms ranging from contact urticaria and bronchial asthma to anaphylactic shock. Natural rubber prepared from the milky sap (latex) of the tree Hevea brasiliensis is a common component of numerous home products and medical supplies, including surgical gloves and catheters. While delayed hypersensitivity reactions to latex-containing products are often traced to additives and stabilizers employed for their production, immediate reactions are closely associated with endogenous protein components of the natural rubber latex materials.

Recently, coincident IgE-mediated allergies to latex and multiple fruits or vegetables have been documented. In vivo and in vitro investigations of clinical specificity have produced complex patterns of allergenic cross-reactivity (suggesting shared or common antigenic components) among botanically-unrelated allergens such as latex and foods. While the details of the clinical association of latex and food allergies await further study, documentation of food allergies known to coexist with latex sensitivities may be useful for identifying the risks of latex exposure for some patients.

Listed below are the allergens reported to be associated (clinically or immunochemically) with natural rubber latex.

Degree of Association or Prevalence

High (4)

Banana, Avocado, Chestnut, Kiwi

Moderate (7)

Apple, Carrot, Celery, Papaya, Potato, Tomato, Melons

Low or undetermined (33)

Pear, Mango, Sweet Pepper, Peach, Rye, Cayenne Pepper, Plum, Wheat, Shellfish, Cherry, Hazelnut, Sunflower Seed, Pineapple, Walnut, Citrus Fruits, Strawberry, Soybean, Coconut, Fig, Peanut, Chick Pea, Grape, Buckwheat, Castor Bean, Apricot, Dill, Lychee, Passion, Fruit, Oregano Zucchini, Nectarine, Sage, Persimmon

Simultaneous occurrence of allergies to certain pollens and foods described above have also been documented in reports independent of those focusing on natural rubber latex. Significant levels of allergenic cross-reactivity have been demonstrated for the allergen groups listed below:

Mugwort with Carrot, Celery, Apple, Peanut and Kiwi
Birch with Apple, Pear, Peach, Cherry and Hazelnut
Grasses with Potato
Ragweed with Banana and Melons

Literature Review on Latex-Food Cross-Reactivity 1991-2006[1]
Allergic Cross Reactivity of Latex and Foods[2]

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