

Cross Reactions Between Food and Environmental Allergens



Having seasonal allergies may increase a person's likelihood of having certain food allergies and vice versa. There is also some evidence that the level of reaction to food allergies will be higher in people that are also sensitive to particular environmental allergens. The following table shows potential cross-reactions that should be taken into account when evaluating a person with allergies.

ENVIRONMENTAL ALLERGEN	FOODS					
	Fruits		Vegetables	Spices		Others
Mugwort (Artemisia vulgaris)	Apple Cherry Peach Apricot	Nectarine Pear Plum/prune Quince Kiwi	Celery Carrot Potato	Anise Basil Caraway Coriander Dill Fennel Marjoram	Mustard Oregano Paprika Parsley Pepper Tarragon Thyme	Hazelnuts Almonds Walnuts
Tree pollen (Esp. birch and alder) 50% of people with tree pollen allergy have cross- reactivity with some fruits and vegetables	Apple Cherry Fig Kiwi Lychee Nectarine	Pear Plum Peach Prune Persimmon Strawberry	Beans Carrot Celery Green Pepper Potato Tomato Parsnip Peas	Anise Basil Dill Caraway Chicory Coriander Cumin Fennel	Marjoram Oregano Parsley Paprika Pepper Tarragon Thyme	Hazelnuts Almonds Walnuts
Ragweed (Ambrosia artemisiifolia)	Melon* Watermelon Cantaloupe Honeydew Banana		Zucchini Cucumber			Sunflower seeds
Latex Over 50% of people with latex allergy react to fruit; >35% of these reactions are anaphylactic	Banana Avocado Kiwi Papaya Apricot Apple Melons*		Celery Potato Tomato Carrot			Chestnut

^{*90%} of people with melon allergy have another fruit allergy.

References

- 1. Grier T. Latex cross-reactive foods fact sheet. American Latex Allergy Association. http://latexallergyresources.org/latex-cross-reactive-foods-fact-sheet
- $2. \quad Pauli \ G, Metz-Favre \ C. \\ \text{``[Cross reactions between pollens and vegetable food allergens]}. \ Rev \ Malad \ Respir. \\ \text{April 2013; } 30(4): 328-37. \ doi: 10.1016/j.rmr. \\ \text{2012.10.633}. \\ \text{2013.1016} : 10.1016/j.rmr. \\ \text{2013.1016} : 10.$
- 3. Vieths S, Scheurer S, Ballmer-Weber B. Current understanding of cross-reactivity of food allergens and pollen. Ann New York Acad Sci. May 2002; 964: 47–68.
- 4. Egger M, Mutschlechner S, Wopfner N, et al. Pollen-food syndromes associated with weed pollinosis: an update from the molecular point of view. Allergy. April 2006; 61(4): 461–76. doi:10.1111/j.1398-9995.2006.00994.x.
- 5. Sano A, Yagami A, Inaba Y, et al. Sensitization profiles of a case of pollen-food allergy syndrome. Allerg Intl. 2011; 60(1): 97–101. doi:10.2332/allergolint.10-CR-0235.
- 6. Pollert SM, Warniment C, Mori T. Latex allergy. Am Fam Phys. 2009; 80(12):1413-1418.
- 7. Blanco C, Carrillo T, Castillo R, et al. Latex allergy: clinical features and cross-reactivity to fruit. Ann Allergy. 1994; 73:309-14.