











POLLEN/FOOD/LATEX CROSS-REACTIVITY

	
	Apple Peach Plum Pear Cherry Apricot Almond
	Rosaceae
	
	Carrot Celery Parsley Caraway Fennel Coriander Aniseed
	Apiaceae
Birch	
	Soybean Peanut Hazelnut
	Fabaceae (old Leguminosae) Betulaceae

	
	Cantaloupe Honeydew Watermelon Zucchini Cucumber
	Cucurbitaceae
	
	Banana
Musaceae	
Ragweed	
	Celery Carrot Parsley Caraway Fennel Coriander Aniseed
	Apiaceae
	
	Bell pepper Black pepper Garlic Onion
	Solanaceae Piperaceae Liliaceae
Mugwort	
	Mustard Cauliflower Cabbage Broccoli
	Brassicaceae

Birch

also avocado, banana, chicory, fig, kiwi, nectarine, parsnips, black/white/green peppers, potato, prunes, strawberry, tomato and wheat; maybe mango, peanut, Brazil nut, walnut, and other herbs/spices (basil, dill, lovage, marjoram, oregano, paprika, tarragon, thyme, and wormwood)

Ragweed

also artichoke, echinacea, dandelion, hibiscus, and chamomile

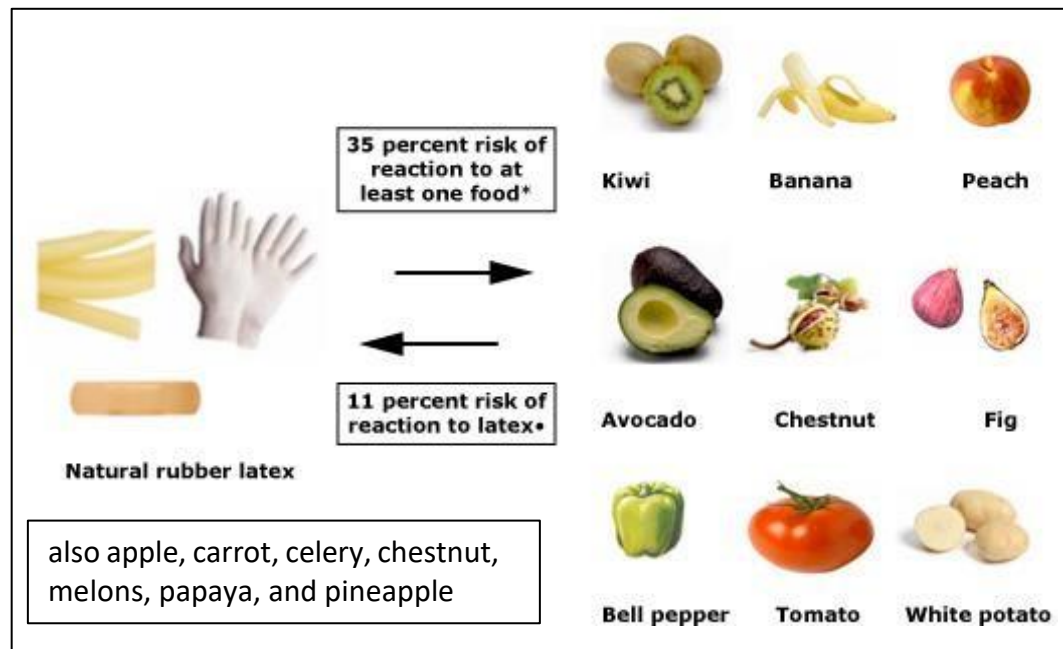
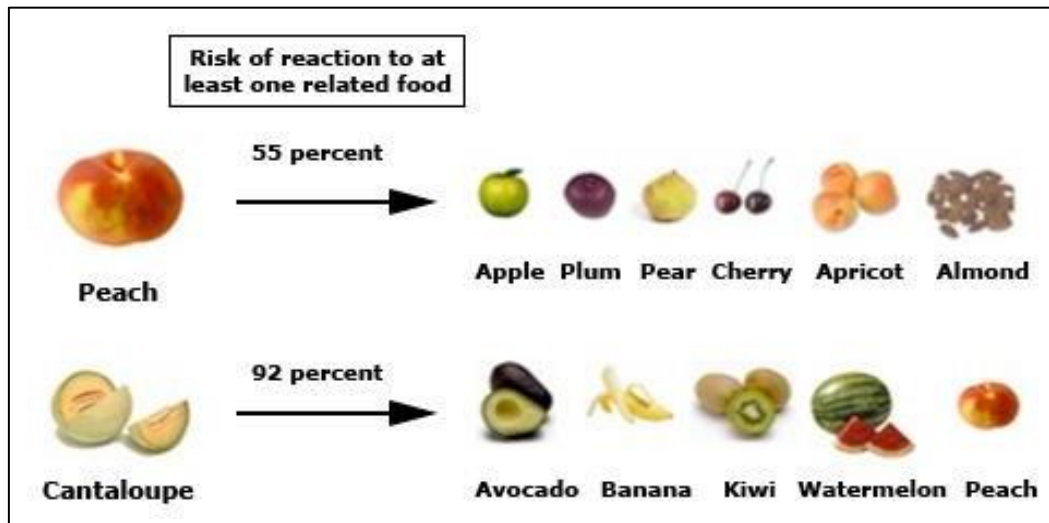
Mugwort

also peach, chamomile, sunflower seed; maybe peanut and melon

Grass pollen

fig, melons, oranges, tomato; maybe apple, garlic, green peas, kiwi, onion, peach, peanuts, and potatoes

Possible cross-reactions to any of the above birch, grass, mugwort, or ragweed pollens: berries (strawberry, blueberry, raspberry, etc), citrus (orange, lemon, etc), grapes, mango, figs, peanut, pineapple, pomegranates, and watermelon.



1. **Timothy grass** seems to share allergens with **Kiwi** extract
2. **Mugwort, Ragweed, and Timothy** pollen also share IgE-binding epitopes with glycoprotein **Latex** allergens.

Syndrome or association	Relevant allergen components involved
<i>Alternaria</i> -spinach syndrome	Al t a 1
Mite-shrimp syndrome	Der p 10 tropomyosin
Cat-pork syndrome	Fel d 2 cat serum albumin
Bird-egg syndrome	Gal d 5 alpha-livetin (chicken serum albumin)

References

<https://acaai.org/allergies/allergic-conditions/food/pollen-food-allergy-syndrome/>

<https://www.thermofisher.com/allergy/us/en/living-with-allergies/understanding-allergies/cross-reactivity.html>

Popescu FD. Cross-reactivity between aeroallergens and food allergens. *World J Methodol.* 2015 Jun 26;5(2):31-50. doi: 10.5662/wjm.v5.i2.31. PMID: 26140270; PMCID: PMC4482820.

Profilin from mango has a structure similar to birch tree profilin: it is responsible for cross-reactions between mango and pear, apple, and peach. A panallergen with a structure similar to mugwort defensin (Art v 1) which cross-reacts with celery, carrot, peanuts, pepper, aniseed, and caraway -<https://aacijournal.biomedcentral.com/articles/10.1186/s13223-018-0294-1>