

ALLERVISION Useful Hints for Avoiding Allergens

Ideally, the best way of avoiding allergy symptoms is by staying away from the allergens that cause them. This requires a dedicated effort because most people with an allergy to one environmental particle — pollen, dust, pet dander or mold — are also allergic to others. Each allergen, presented individually, may not activate your symptoms but multiple ones can gang up on your immune system and create a reaction. That reaction could range in severity and discomfort from sneezing or itchy eyes to recurrent bronchitis, sinus infections and asthma.

Therefore, it's important to discover all your triggers with an allergy test and take the necessary steps to avoid them wherever possible.

If you are allergic to POLLENS

Pollens are the tiny airborne particles released by trees, weeds, and grasses for the purpose of fertilization and reproduction. Some pollens circulate only at certain times of the year, others are perennial. These tips can help you all year:

- Stay indoors when pollen counts are high for pollens that affect you (you can find local pollen counts at www.pollen.com)
- Avoid yard work or wear a micro-fiber mask when digging in dirt
- Keep windows in your home and car closed and set your air conditioner to "re-circulate"
- Use high-efficiency particulate air (HEPA) filters for your furnace and vacuum cleaners
- When you work outside, remove work clothes outdoors and carry them in a bag to a washing machine
- Shower after working outside and be sure to wash your hair, eyes and eyelashes
- Take allergy medications, if necessary, 30 minutes before going outdoors
- Avoid highways or industrial plants; exhaust and air pollution make symptoms worse
- When exercising, breathe through your nose

If you are allergic to MOLD SPORES

Molds live indoors and outdoors. They give off spores that can cause allergic reactions throughout the year. These steps can help you avoid exposure to outdoor mold:

- Avoid barns, greenhouses, sleeping bags, summer cottages, and walking through uncut fields
- Avoid mowing grass, handling mulch or compost, raking leaves, or working with hay
- Avoid using fans that draw in outside air; when possible, use an air conditioner on recirculate and keep windows and doors closed
- If you have a basement or live in an area of high humidity, use a dehumidifier in your home
- Wash evaporative ("swamp") coolers
- Fix water leaks promptly

- Clean furnace filters, refrigerators and dehumidifiers (and clean drip pans with bleach)
- Thoroughly dry clothes before storing
- Clean moldy areas with fungicide or bleach

If you are allergic to ANIMAL DANDER

Allergy to an animal (such as a cat or dog) is actually a sensitivity to a protein in the pet's saliva which is transferred, by licking, to its skin and fur. Try these preventative measures:

- If you own a furry pet, try to keep it outdoors
- Confine the pet to a room with a polished, wipe able floor
- Use high-efficiency particulate air (HEPA) filters and vacuum cleaners often
- Wash your pet weekly in warm water and soap

If you are allergic to HOUSE DUST MITES

Dust mites are invisible creatures that live in house dust and feed on dead skin flakes. Most tips to handle dust mites involve regularly cleaning your home and furnishings (including curtains and beds):

- Keep house clean by vacuuming and reducing clutter
- Wash bedding weekly in 130°F hot water
- Wear an appropriate mask while cleaning and avoid area for 20 minutes after cleaning
- Change furnace and air conditioner filters regularly
- Encase mattresses, pillows and box springs in allergen-proof covers
- If you have a basement or live in an area of high humidity, use a dehumidifier to reduce the humidity in your home

If you are allergic to COCKROACHES

Cockroach saliva, fecal matter and shed skin can cause problems for to humans immune systems. Make every attempt to eradicate roaches and follow these other procedures:

- Place bait traps or call a professional exterminator
- Wash dishes, vacuum, keep food and garbage in closed containers and take out garbage regularly
- Don't store paper bags, newspapers or cardboard boxes
- Seal plumbing openings, cracks and crevices

If these avoidance measures seem unreasonable, impossible or undesirable, ask your healthcare provider about immunotherapy. This treatment, which does not use medication, conditions your body to accept allergens as normal elements of the environment — which they are — and so it stops trying to fight them off. Consequently, immunotherapy can put your allergies into remission.

ALLERVISION | *Oral Allergy Syndrome Reference*

Pollen/food cross-reactivities important in Oral Allergy Syndrome (OAS)

Alder

- **Nuts, seeds, herbs:** almonds, parsley, hazelnuts
- **Fruits:** apples, cherries, peaches, pears, strawberry, raspberry
- **Vegetables:** celery

Birch

- **Nuts, seeds, herbs:** almonds, chicory, coriander, fennel, hazelnuts, parsley, parsnips, soy, wheat, walnuts (potentially)
- **Fruits:** apples, apricots, avocados, bananas, cherries, fig, kiwi, nectarines, peaches, pears, peppers, plums, prunes, strawberries
- **Vegetables:** carrots, celery, potatoes

Grass

- **Fruits:** figs, melons, tomatoes, kiwi, peaches
- **Vegetables:** celery

Mugwort Pollen

- **Nuts, seeds, herbs:** coriander, fennel, parsley, sunflower seeds
- **Fruits:** peppers
- **Vegetables:** carrots, celery

Ragweed

- **Nuts, seeds, botanicals, herbs:** echinacea, dandelions, hibiscus, chamomile tea, sunflower seeds
- **Fruits:** banana, cantaloupe, cucumber, honeydew, watermelon, tomatoes
- **Vegetables:** zucchini, artichoke

Molds (Possible Cross-Reactions)

- **Fungi:** mushroom
- **Vegetables:** spinach

Possible cross-reactions to any of the above

- **Nuts, seeds, herbs:** peanut
- **Fruits:** berries (strawberry, blueberry, raspberry, etc.), grapes, mango, figs, pineapple, pomegranates, watermelon

Latex Rubber

- **Nuts, seeds, herbs:** chestnuts
- **Fruits:** banana, avocados, kiwi, papaya

ALLERVISION | Allergen Cross-Reactivity

Groups of species within each genus listed below demonstrate significant cross-reactivity. Relationships are relevant in determining antigen selection for allergy testing and immunotherapy formulation.

WEEDS

Ambrosia

Southern and Slender Ragweeds do not cross-react as well as these other Ragweed species...

- False Ragweed
- Giant Ragweed
- Short Ragweed
- Western Ragweed

Artemisia

- Mugworts
 - Sages
 - Wormwood
- Marked cross-reactivity exists between *Artemisia* species.

Chenopod and Amaranth

Skin testing suggests strong cross-reactivity within the families of *Atriplex*, *Salsola*, *Chenopodium*, *Kochia*, *Amaranthus*. The predominant species in the geographic area should be used.

Salsola

- Russian Thistle

Chenopodium

- Lamb's Quarter

Kochia

- Burning Bush

Amaranthus

- Amaranth
- Pigweed
- Red Root Pigweed

Atriplex

- Saltbush
 - Wingscale
- Marked cross-reactivity exists between *Atriplex* species.

DUST MITES

Mite species represent a hybrid of unique allergens and inter-specific cross-reacting epitopes. Generally the species are tested and treated independently but when both are present, dosage modifications are acceptable.

D. pteronyssinus

D. farinae

GRASSES

Subfamily Festucoideae

- Kentucky Blue
 - Meadow Fescue
 - Orchard
 - Red Top
 - Rye
 - Timothy
- Marked cross-reactivity exists between subfamily members.

Note: The Eragrostoideae family (Bermuda) and Panicoideae subfamily (Bahia, Johnson) feature unique allergenicity and should be tested individually.

TREES

Cupressaceae

- Cedar
 - Cypress
 - Juniper
- Family members demonstrate significant cross-reactivity. Single member representation and/or testing is common practice.

Betulaceae and Fagaceae

- Alder
 - Beech
 - Birch
 - Chestnut
 - Hazel
 - Hornbeam
 - Oak
- Cross-reactivity is prevalent within *Betulaceae* and *Fagaceae* families. Local prevalence is key to appropriate selection.

Populus

- Aspen
- Cottonwood
- Poplar

Oleaceae

- Ash
 - European Olive
 - Privet
- Cross-reactivity of importance within *Oleaceae* exists between Ash and Olive species.

COCKROACH

German cockroaches are common in American homes. Use of a representative mixture including German and American is appropriate.

- German cockroach
- American cockroach