

# ALLERGY

Allergic persons are unable to tolerate ordinary non-harmful substances because their immune system is too sensitive. As a result they have reactions expressed in the form of asthma, hay fever, eczema, hives, ear infections, sinus problems, drug reactions, intestinal reactions and/or eye symptoms.

The causative substance, which is called an allergen, may enter the body through the nose and lungs (pollens, mold spores, dust mites, animal dander, etc.), by ingestion (food or beverages), or through the skin (plants, insect bites/stings, cosmetics or chemicals).

An allergic person is almost always sensitive to more than one allergen and may have different causes of symptoms in different regions of the country. They may have one or several allergic diseases at the same time and may have different allergy symptoms at different times of their life. For example, it is quite common for an allergic person to have recurrent ear infections and/or eczema as an infant, asthma as a child, and sinus or hay fever as an adult. The tendency to develop allergy is inherited and stays with a person throughout his life. Many allergic people have periods in which they are free of symptoms, but the inherited pattern never leaves. The substances to which an allergic person is sensitive may change from time to time with new sensitivities appearing and others fading away.

Allergic persons are usually sensitive in various degrees to many allergens, generating the term an "Allergic Load", indicating how many of their allergens are influencing their symptoms at any given point in time. A major goal is to "lighten the load" as much as possible through:

- Removing the offending substances from the person's environment or modifying it with products like \*Solunogen™ found at [www.Solunogen.com](http://www.Solunogen.com).
- Desensitization injections of the offending substance to reduce a person's sensitivity.
- Employing medications to control symptoms of the allergic diseases.
- Obtaining control of aggravating factors such as emotional stress, infections, or irritant exposure, tobacco smoke, pollution and high humidity.
- Using new anti IgE (the allergic antibody) monoclonal antibody injections.

Removal of the offending allergens is the preferred way of treatment if it can be done practically. Some allergens can be completely removed such as food allergens by diet restriction and animal allergens by removal of a pet from the environment. Treating the home with \*Solunogen™ can inactivate those allergens in the home environment which cannot be removed.

Many allergic persons find that their symptoms are precipitated or aggravated by non-allergic factors. Some of these factors are fatigue, stress, irritating matter in the air such as smoke, ozone, and strong perfumes, sudden changes in the weather and air pollution. Treatment, in such cases, should include attention to the aggravating factors as well as treatment directed at the allergens themselves.

Strictly speaking, *allergy* is never cured; rather the symptoms are controlled. Most of the general measures used to obtain improvement need to be continued for many years after the symptoms are relieved in order to maintain that control. We retest all patients on allergy injections every two years to be sure the shots continue to contain the components necessary for optimal improvement. Both new allergens and changes in the level of sensitivity and old allergens can be detected with this individualized observation - For more information visits our website [www.drsmithallergy.com](http://www.drsmithallergy.com).

\*Solunogen™ was invented by and is offered exclusively by AAAC and AllerSmith research group. For more information on Solunogen, please visit [www.Solunogen.com](http://www.Solunogen.com).

## **ENVIRONMENTAL CONTROL (House Dust Allergy)**

The causes of allergy in house dust is not the "dirt" in a home, but protein substances produced from inhabitants within the home, including animals, molds, dust mites, and cockroaches. The house dust mite is a microscopic insect which lives in the soft surfaces, such as pillows, carpet, cloth upholstered furniture and mattresses. Debris from it's body causes allergy. Pet's dander and dried saliva, mold spores and the dust from dead roaches and their egg cases add to the "allergic soup" of allergens within our homes.

### **HOW TO PREPARE AN ALLERGY SAFE BEDROOM**

- Wash bed linens once a week in hot water - DO NOT use any quilts or comforters, which can not be cleaned at least once a month. Velux blankets are a good alternative. An excellent product resource is [www.allergyasthmatech.com](http://www.allergyasthmatech.com).
- Air cleaners - both electric and non-electric are sometimes helpful in keeping the airborne allergen content of a home controlled. (see additional information) - (Ionic breeze) type ionization devices ARE OF VERY LITTLE HELP (and may harm patients by ozone production). Consumers Report magazine and its website [www.consumersreport.org](http://www.consumersreport.org) are excellent resources for evaluation of vacuums, air cleaners, and dehumidifiers.

Beware!! Lots of products are out there being sold at very high prices with very low degrees of efficiency.

### **Controlling Dust Mites:**

Dust mites are found throughout the house, but they especially thrive in high humid areas where human dander (dead skin flakes) is located. Symptoms of dust mite allergy can include a congested or runny nose with sneezing (particularly in the morning), itchy, watery eyes, coughing and wheezing. Recently atopic dermatitis (allergic eczema) has been added to the list of illnesses caused by dust mite allergy.

To reduce dust mites, it is important to control humidity to below 60% throughout the home by using a dehumidifier/air conditioning. Wall-to-wall carpeting should be removed as much as possible. Throw rugs may be used if they are regularly washed in hot water or dry cleaned.

Because people spend more time in the bedroom than in any other room, it is essential to reduce mite levels there. Encase mattresses, box springs and pillows in airtight, zippered special allergen-proof fabric covers. Bedding should be washed weekly in hot water (130°F) and dried in a hot drier. For waterbeds, regularly wash the mattress pad on top of the bed. Comforters and pillows made of natural materials such as down feathers or cotton should be replaced with items made from synthetic fibers, or covered with allergy-proof encasings.

It is also best to have smooth, uncluttered surfaced, with dust-collecting objects placed in drawers or closed cabinets. Weekly vacuuming can help to further remove dust mites. Allergic individuals should also wear a dust mask, when cleaning. Solunogen™ is effective in inactivating the allergens on surfaces of carpeting and upholstered furniture and bedding.

## **Controlling Animal Dander:**

Contrary to popular belief, people are not allergic to an animal's hair, but rather to a protein found in the saliva, dander (dead skin flakes) or urine of an animal with fur. These proteins are carried in the air as very small particles, which can land on the lining eyes or nose, or may be inhaled directly into the lungs or stick to the skin. Symptoms of animal allergy can include wheezing, shortness of breath, itchy, runny nose and eyes, swollen eyes and throat. Itching of the skin or a raised, red rash (hives) can result from touching an animal to which one is allergic. Symptoms will occur quickly, sometimes within seconds of exposure to the animal. For some people, symptoms may build and become most severe six to eight hours after they have had contact with the animal, especially bothersome for asthmatics.

A particular cat or dog produces varying amount of allergens, and this amount can vary from animal to animal. All breeds are capable of triggering symptoms - there are no 'non-allergenic' breeds of cats or dogs. The amount of activity and range of occupancy by an animal within a home contribute to the degree in which a particular animal will induce allergic symptoms to a home's occupants or visitors. Persons with severe animal allergies can even experience reactions in public places where dander has been transported on pet owners' clothing. This issue is especially troublesome in school age children and school employees.

The most effective way to combat symptoms of animal allergy is to remove the pet from the home and avoid any contact. Keeping an animal outdoors only is a partial solution, since homes with pets in the yard still have higher concentrations of animal allergens. Before you get a pet, spend time with someone else's dog or cat to determine if you're allergic. If you already have an animal to which your or a family member is allergic, try to place it with a caring, non-allergic friend or relative. Although this separation can be difficult, it is best for the health of you or your allergic family member. Consider pets such as a turtle, hermit crab, fish, snake, or other animals without fur or feathers when choosing a pet. A point to remember about animals which do go outside from indoors is that when they re-enter the home they carry mold and pollen on their fur to provide a source of outdoor allergen indoors.

If you cannot totally avoid exposure to the animal that causes your allergy symptoms, try to minimize contact. Most importantly, keep the pet out of the bedroom and other rooms in which those reasons with allergies spend a great deal of time. Some studies have demonstrated that bathing dogs and cats on a weekly basis may reduce the amount of allergens that are shed in the home. If you plan to wash your pet regularly, consult with your veterinarian regarding care of the animal's skin. Also, have a non-allergic family member frequently brush the pet (preferably outdoors) to remove loose hair and allergens. While dander and saliva are the source of cat and dog allergen, urine is the source of allergens from rabbits, hamsters and guinea pigs; ask a non-allergic family member to clean the animal's cage.

Animal allergens can accumulate on all surfaces in the home. Mattresses and cushions may be covered in zippered plastic casings to prevent the release of allergens. Vacuuming is not effective in decreasing animal allergens unless the vacuum bag retains the small particles can move through the vacuum. Using high quality micro pore bags and/or vacuums with HEPA vacuum filters may be helpful. As with dust mites, best to have a hardwood, tile or linoleum floor.

It can take weeks or months for fabrics to come clean of allergens, and active animal allergens may persist for a year or more even after the animal has been removed from the home. Use Solunogen™ to inactivate allergens on the bedding of the animals and areas of the home which they frequent.

## **CONTROLLING OUTDOOR ALLERGENS**

Seasonal allergic rhinitis, often referred to as “hay fever” affects more than 35 million people in the US. Airborne pollens and mold spores are outdoor allergens that commonly trigger symptoms during the spring and fall. During these times, seasonal allergic rhinitis sufferers experience sneezing, congestion, runny nose, and itchiness in the nose, roof of mouth, throat, eyes and ears. These early symptoms can and frequently do progress to chronic sinus infections, chronic ear infections, and most severe of all – asthma.

### **POLLENS**

Pollens are tiny, male reproductive dust from flowering plants. These microscopic, powdery granules are necessary for plant fertilization. The average pollen particle is less than the width of a human hair. Pollens from plants with bright flowers, i.e. those with colorful petals which attract insects usually do not trigger allergies. These large, waxy pollens are carried from plant to plant by bees and other insects. On the other hand, many trees, grasses, and low-growing weeds have small, light dry pollens that are well suited for dissemination by wind currents. Since high volumes of pollen must be produced by the plants depending on wind pollination, these are the pollens that trigger allergy symptoms. Seasonal allergic symptoms in the early spring are often triggered by the pollens from oak, cedar, elm, birch, ash, hickory, poplar, sycamore, maple, cypress, and walnut. In the late spring and early summer, pollinating grasses, including timothy, fescue, orchard, and blue grasses often trigger symptoms. In addition to ragweed, the pollen most responsible for late summer and fall hay fever in North America are other weeds and grasses. These weeds include pigweed, Russian thistle, cocklebur, sorrel, wormwood, red top grass, lambs quarters, and Johnson grass. Each plant has a period of pollination that does not vary greatly from year to year. Weather conditions can affect the amount of pollen in the air at any given time. The pollination season starts later in the spring the further north one goes. In the southern states, the pollen season can begin as early as January. For much of the United States, the pollen season lasts from February or March through October. Trees pollinate earliest, from late February through May. Grasses follow next in the cycle, beginning pollination in late April or early May and continues until mid July. Weeds usually start to pollinate in late summer and early fall.

### **MOLD SPORES**

Molds are microscopic fungi – related to mushrooms. Like mushrooms, their spores float in the air like pollen, and are present throughout the year in many states. Unlike pollens, molds do not have a specific predictable allergy season, but are affected by the weather conditions such as wind, rain, or temperature. Outdoor mold spores begin to appear after a spring thaw and reach their peak in July in warmer states and October in colder states. Molds can be found all year long outdoors in the south. Coastal regions and other parts of the country with good air circulation have fewer allergy problems from mold. Common allergy spores producing molds include alternaria, cladosporium, penicillium, and aspergillus. Molds are present in almost every possible habitat. Outdoors, they can be found in soil, vegetation, and rotting wood. Molds can be found indoors in damp attics, basements, bathrooms, refrigerator drip trays, food storage areas, garbage containers, old carpets, and upholstery.

### **EFFECTS OF WEATHER AND LOCATION**

Weather can greatly influence allergy symptoms. Symptoms are often minimal on days that are rainy, cloudy, or windless because pollen does not move about during these conditions. Hot, dry, and windy weather signals greater pollen and mold distribution, thus, increased allergy symptoms. If you are allergic to plants in your area, you may believe that moving to another area of the country with different plant will help lessen your symptoms. However, many pollens, especially grasses and molds are common to most plant zones in the United States. Additionally, other related plants can also trigger the same symptoms. Many who move to a new region to escape their allergies find they acquire allergies to new airborne allergens prevalent in their area within one to two years. Therefore, moving to another part of the country to escape allergies is often ultimately disappointing and not recommended. Short 2-6 week vacations in a different part of the country when your hometown allergy symptoms are high, can however produce a welcome relief vacation. To lessen your symptoms, we may prescribe an allergy nose spray, non-sedating antihistamine, decongestant, or other medications. If your symptoms are not relieved with the above measures or if you have them for several months out of the year, we may also recommend immunotherapy treatment, i.e. allergy vaccinations. This treatment involves receiving injections periodically over a period of three to five years. This treatment helps your immune system to become more resistant to the specific allergen's effects and lessens your symptoms as well as reducing the need for future medications.

## DO'S AND DON'TS

Here are some practical points that you may want to follow during the pollen and mold season to lessen your allergy symptoms:

- Keep windows closed to prevent pollens or mold from drifting into your home.
- Use air conditioning, which cleans, cools, and dries the air, or at least window filters if the window must be open.
- Minimize early morning activity when pollen is usually emitted – between 5-10 a.m.
- Keep your car windows closed when traveling. Use the A/C in the close vent mode.
- Try to stay indoors when the pollen count or humidity is reported to be high, and on windy days when dust and pollen are blown about. Mold peaks late afternoon to early evening.
- Avoid being outdoors during these times if you are mold spore allergic.
- Take a vacation during the height of the pollen season to a more pollen-free area, such as the beach, or sea cruise or other low mold/pollen region.
- Bathe and wash hair before going to bed.
- Use nasal saline flushes frequently.
- Don't mow lawns or be around freshly cut grass dust; mowing stirs up pollens and molds.
- Don't rake leaves, as this also stirs up molds.
- Don't hang clothing or sheets out to dry; pollens and molds may collect in them.
- Keep indoor plants to a minimum if you are allergic to mold. Wet soil encourages mold growth.
- Keep your home dry and clean, use A/C and dehumidifiers.
- Keep the humidity between 40 and 60 percent.
- Bathe indoor animals at least once a week – they carry pollen and mold on their fur into your home.

## MOLD AND MILDEW CLEANING SOLUTION

- Three tablespoons (3 tbsp.) powdered dishwasher detergent
- One quart (32 oz) Clorox or Purex
- Three quarts (96 oz) warm water
- Two ounces (2 oz) Lysol

**Directions for use:** Use rubber gloves when applying to the affected areas. Wash the area with water after the removal of mildew. Allow the area to “air out” completely after using this solution and avoid inhaling the fumes during the cleaning process.

## COCKROACHES IN ALLERGIES AND ASTHMA

For their roles in promoting allergies and asthma, cockroaches are guilty as charged. According to the National Institute of Health, as many as ten to fifteen Americans may suffer from roach-related allergies. This makes cockroaches the second greatest offender, after dust mites. In addition, there is reason to believe that an initial allergic reaction to roaches may cause subsequent allergic reactions to other hard-boiled invertebrates. Diners with these compound allergies would be robbed of delicacies such as lobster, crab, or shrimp.

## **ALTERING THE ENVIRONMENT TO CONTROL COCKROACHES IS THE BEST METHOD TO CONTROL THE SYMPTOMS CAUSED BY THESE RESILIENT INSECTS.**

Get rid of all accessible sources of food. Eliminating sources of water available to them will greatly speed the demise of cockroaches that you are trying to starve out.

By lowering the temperature in your home, you can slow growth rates and extend the gestation periods of pest roaches.

Try a few traps. Because baited traps are relatively expensive, the budget-conscious may prefer brands without bait. A few drops of banana extract applied to the inside of one of these budget traps will greatly enhance its cockroach appeal. Even cheaper to acquire and set, are mason or baby food jars. They can be modified for indoor placement by adding an exterior coat of black paint or a paper wrapping to darken their interior.