Allergy Center

Patient Handbook

Hours:
Monday: 7:30 am- 5:00 pm
Tuesday: 7:30 am- 5:00 pm
Wednesday: 7:30 am- 5:30 pm
Thursday: 7:30 am- 5:00 pm
Friday: 7:30 am- 5:00 pm

Allergy Dept. Phone: 518-701-2119
Allergy Dept. Fax: 518-701-2130

For additional information and resources, please visit our website:
www.albanyentandallergy.com
Table of Contents

1. Overview/About the practice ....................... Page 3
2. What is an allergy? ................................. Page 4
3. Spring and Summer Pollens ......................... Page 5-7
4. Allergens present year round ....................... Page 8-11
5. Testing for allergies ................................. Page 12
6. Treatment of allergies ............................... Page 12
7. Environmental Controls ............................. Page 13-18
8. Diet .................................................. Page 19-25
9. Medications .......................................... Page 27-28
10. Immunotherapy ....................................... Page 29-30
11. Allergy Shots ........................................ Page 30-32
12. Allergy Drops ....................................... Page 33-34
13. Reactions to Immunotherapy
   *Emergency Information* .......................... Page 35
15. Pyrethrum .......................................... Page 37

THIS OFFICE HAS MANY PATIENTS WITH ASTHMA AND CHEMICAL SENSITIVITY. FOR THIS REASON, WE ASK THAT YOU REFRAIN FROM WEARING PERFUME AND OTHER HEAVILY SCENTED PRODUCTS WHEN COMING TO THIS OFFICE.

THANK YOU FOR YOUR COOPERATION. 08/14
Albany ENT & Allergy Services offers comprehensive evaluation and treatment of allergic disorders: inhalant, food, contact and chemical that affect the ears, nose, throat and skin as well as asthma.

Ear, Nose & Throat doctors (Otolaryngoloists) play a leading role nationally in the management of patients with allergy-mediated respiratory, head, neck, and related problems.

Our physicians are Otolaryngic Allergists. An Otolaryngic Allergist is a physician specially trained to diagnose the cause of allergic disease and treat the specific condition.

To become an Otolaryngic Allergist a physician completes:

• Four years of medical school

• Five years of training in otolaryngology - head and neck surgery

• Obtains certification from the American Board of Otolaryngology with fellowship certification from the American Academy of Otolaryngic Allergy

Otolaryngic Allergy is the largest subspecialty field within otolaryngology- head and neck surgery in the United States and has been practiced for decades by otolaryngologists who complete the educational requirements of the American Academy of Otolaryngic Allergy.

One of the reasons otolaryngologists are involved in otolaryngic allergy is because many of the ear, nose and throat symptoms our patients experience are in fact allergy-mediated.

Being trained in the allergy specialty allows for a more comprehensive approach to providing the best possible medical care to our patients.

The Allergy Center is open weekdays from 7:30 am to 5:00 pm with extended hours 7:30 to 5:30 pm on Wednesdays. Our dedicated allergy nursing staff provides our allergy patients with personalized patient care and support. Testing and immunotherapy (allergy shots and sublingual drops) is provided to many patients each year.

If you do start immunotherapy, appointments are not required when you come in for your shots or drops. We do ask, however, that you arrive at least a half hour prior to closing for drops and for shots when waiting after your immunotherapy is required.
What is an allergy?

Allergy is a condition, often inherited, in which the immune system of the affected person reacts to something that is inhaled, eaten or touched, that doesn’t affect most other people. The patient’s immune system reacts to this substance as if it were an “enemy invader” (like a virus). This reaction leads to symptoms that often adversely affect the patient’s work, play, rest and overall quality of life. Any substance that triggers an allergic reaction is called an allergen. Allergens “invade” the body by being inhaled, swallowed or injected. These allergens may also be absorbed through the skin.

Common allergens include pollen, dust and mold.

An allergy is the body's immune system having an exaggerated response to a substance. An allergic response can range from mild to severe and can be triggered by a variety of substances such as:

- **Environmental sources** such as:
  
  Pollens from Grasses, Weeds, Trees and Flowers
  
  Fungi such as mold
  
  Dust and Dust Mites
  
  Animal dander from cats, dogs, rabbits, horses, etc.

- **Foods** such as strawberries, peanuts, wheat or dairy products

- **Chemical substances** such as latex and cleaning agents.

Remember that allergens are cumulative. Your reaction is compounded when you are exposed to multiple sources of irritation so reducing the total allergens in your environment is critical to relief. Maintain good communication with your physician and allergy staff about your symptoms to help determine the best treatment options for you.
Spring and Summer

**Pollens** - Allergy symptoms that occur primarily in the spring, summer, or fall are frequently the results of inhaled pollens. Tree pollens in the spring, grass pollen in the early summer and weed pollens in the late summer and fall provide a predictable pattern of symptoms often helpful in identifying the offending pollens. Pollen counts are higher on dry, hot and windy days. Pollen counts decrease during rain, increase after rain and are highest between 5 and 10 am. Unfortunately exposure to pollen is not limited to outdoors because this is carried inside on clothing, shoes and pets and also enters through open doors and windows.

**Tree Season** (March-June) - Trees prominent to the northeast include maple, birch, oak, cottonwood, and elm.

**Grass Season** (June-October) – Grasses prominent to the northeast region include Bermuda Grass, Kentucky/June Grass, Timothy Grass and Orchard Grass.

**Weed Season** (July/August – October) – Weeds prominent to the northeast region include Ragweed, English Plantain, Lambs Quarter and Cocklebur.

Allergens Present Year Round

**Molds** - Molds or fungi are organisms that thrive on decaying organic matter. Molds are indoors and outdoors. They are present most of the year outdoors, especially during spring and fall. In the winter, when there is a hard frost, is the only time molds are not present outdoors. Most molds produce spores that become airborne and may cay cause inhalant allergies. They thrive in warm, dark, moist areas. Indoors, mold are found in places such as bathrooms, poorly vented laundry rooms and closets. Other problem areas are basements, kitchens, window frames, refrigerator drain pans, old books, plants, leaking roofs, plumbing leaks and deteriorating carpets that provide moisture which allows molds to thrive. Humid, warm air fosters mold growth. Therefore, control of your home's temperature and humidity can have great impact on your allergen exposure in the home.
**House Dust** – We no longer test or treat for house dust due a Food and Drug Administration (FDA) ruling. Keep in mind that house dust consists of mold spores, pet dander, and pollen and dust mites. House dust also consists of dead skin cells.

**Dust Mites** – Dust mites are microscopic insects that feed on tiny particles of skin shed by humans. Like molds they tend to thrive with heat and humidity. Their favorite habitats include mattresses, couches, carpets, bedding, pillows and stuffed animals. They thrive at air temperature’s that are comfortable to humans (65-84 degrees Fahrenheit) and when the humidity is high. They do poorly when the humidity is less than 50%.

**Animal Dander** - Animal dander is small particles found on the surface of animals that are deposited on anything that the animal touches. Animal dander is light and stays airborne longer than pollen. Cat dander in particular is very sticky and will hang around your house for at least six months after the cat is removed from the environment. Cat dander is a very powerful trigger for allergic reaction in many individuals. Even if you do not have a cat at home you will probably be exposed to cat dander through family, friends, and co-workers because the dander is so long lasting and difficult to eradicate. Cat saliva and urine also induces allergy symptoms.
Spring & Tree Pollens

We look forward to Spring; even those of us sensitive to tree pollen.

The American Elm blooms in early February in the South and in March and April in the North.

Box Elder Maple, the most potent of the maples, also blooms in February in southern areas and in April and May in northern and mid-western regions.

The pollen of Sycamores is considered to be moderately allergenic and is shed in April and May.

April and May are also the “pollen release” months, in northern areas, for the powerful Birch and mighty Oak trees. The period is one to two months earlier in the south.

Ash trees are widespread and bloom in February and March in the South. May is the month for the North.

Pecan pollen is a problem from Texas to the Southeast, blooming from March to May. The pollen from Walnut, Hickory and Pecan trees is reported to be large and does not travel a great distance, but does cause local allergy problems in some areas.

Acacia and Mesquite are primarily insect-pollinated, but do cause problems in the Southwest. Mesquite may be a problem for May through July; whereas the Acacia blooms from January to November.

In Texas, the Mountain Cedar produces copious amounts of pollen and can be a problem from October through January.

Welcoming the season of Spring when Mother Nature refreshes everything and everyone is worth some sneezes and itchy eyes.
Allergy Newsletter
For
Summer

“Grasses and weeds, a troublesome pair.
Pollen floating in the summer air.
Plantains, pigweed, thistles and such in the middle of the day are a bit too much!
Cross reactions with composites, too.
No more cucumber, pumpkin or squash for you!”

Grasses
Grass species number approximately 9,000…over 1,200 of which are native to North America; the most familiar being Bahia, Bermuda, Johnson, Kentucky Bluegrass (June), Rye and Timothy. The pollination season extends from May until a “killing frost” occurs. Grass sensitive people living in Southern States are exposed to these significant allergic plants year-round.

Weeds
Several weeds bloom during the grass season causing “double trouble” for some patients; specifically English Plantain, Pigweed and Goosefoot families. Among the most potent of goosefoots are Kochia, Lamb’s quarters and Russian Thistle.

Ragweed (Composite Family) is probably the most recognized and important of allergic plants of North America. The strongest antigen, antigen E, is found in the Ambrosia genus. This includes Short, Giant, False, Southern and Western Ragweeds.

In most areas, Ragweeds bloom from mid-July/August until September/October. Pollen stops forming as night hours lengthen and temperatures drop below 60 degrees!

Composite family flowers include sunflowers, dandelions, marigolds, African daisy, asters and chrysanthemums.

Lettuce, chicory, endive, escarole, artichoke, sunflower seeds, chamomile and tarragon are on the Composite food group roster.

Foods suspected of cross-reactivity include the Melons (Cucurbitaceae); cantaloupe, cucumber, pumpkin, squash and watermelon.

Other “family members or relatives” of the Composite families are of the Artemisia genus; Wormwoods, Sagebrushes, and Mugwort. The Iva genus lists the Marsh – elders.
Allergy Newsletter
On
Epidermals & Mites

Epidermals
The appearance of an animal can trigger many emotions in people, ranging from joy to fear. To an allergic patient, a “cute” cat, dog, bird, rabbit, guinea pig or hamster can provoke reactions ranging from eye and nose inflammation to asthma.

Cats head the list as the most allergenic of the animal species. At present, a non-allergic breed does not exist. Cat allergen is quite cosmopolitan and has been found where felines have never visited. The allergen is carried on clothing and has been identified in schools, offices, etc.

Dogs The American Kennel Club may have guidance on which canines may be less allergic than others.

The guinea pig has moved from being only a laboratory animal to the classification of pet. Hamster allergens seem to be strong sensitizers. These animals have also increased in popularity as pets, as have rabbits and ferrets.

Respiratory problems have been reported in people keeping birds. Feathers, serum proteins and droppings are sources of exposure.

Horse is a source of a very potent allergen. Indirect contact with a horse may provoke symptoms in an atopic individual.

Goose, duck and chicken feathers are used in bedding and outer “winter wear”. They may be comfortable and warm but a potential problem for the allergic person.

Mites
The “mighty” mite is the major allergenic component in house dust. The microscopic arachnid has a life of about three months. Female mites, laying up to 50 eggs produce a new generation about every three weeks. Whether living or dead, the mite and its waste products are potent allergens. The mite population thrives in low damp areas with high humidity. Mites do not suffer from lack of food since their diet consists of skin scales from humans and animals.

Dust mites (D. farinae and D. pteronyssinus) live in mattresses, bedding, carpeting, upholstered furniture, curtains, wall hangings and stuffed animals. It is easy to see why they are found in abundant numbers in bedrooms. Encasing the mattress and pillows with impenetrable covers is recommended. Also, frequent laundering of sheets, pillow cases, blankets, comforters and mattress pads help to control mite exposure. Bedrooms should not be carpeted but when this must be the case, acaricides of 1-3% solution of tannic acid might be helpful. HEPA filtration devices are also useful in controlling exposure to epidermals and mites.
Dusts
Mattress and pillow covers along with air cleaners are recommended for all dust sensitivities.

♦ House Dust
♦ Mite D Farinae
♦ Mite D Pteronyssinus

☐ Cat Avoidance Try to keep pets out of bedroom.
☐ Cattle Avoidance
☐ Cockroach
☐ Dog Avoidance Try to keep pets out of bedroom
☐ Feather
☐ Horse Avoidance

Grasses
Grasses cause the most symptoms in the summer, the beginning of May to the end of August.

♦ Bermuda Grass
♦ Kentucky Bluegrass
♦ Timothy Grass

Trees
Trees cause the most symptoms in the spring when they are budding, the middle of March to the middle of July.

♦ American Elm
♦ Birch
♦ Black Willow
♦ Eastern Cottonwood
♦ Maple
♦ Scotch Pine
♦ Sycamore
♦ White Ash
♦ White Oak
♦ White Poplar

Weeds
Weeds cause the most symptoms from the beginning of July to the end of October in New York State.

♦ Cocklebur
♦ English Plantain
♦ Lamb’s Quarters
♦ Ragweed
♦ Sour Dock
Common Antigens Causing Allergy
General Information

Molds:

- **Alternaria Tenuis** is found in the soil on organic debris and grows on plants and plant material.

- **Aspergillus Fumigatus** is found on chicken, damp hay and grain, damp cloth, leather goods, spoiled foods, damp paper, decaying plant and vegetable material.

- **Candida Albicans** is yeast-like fungus. Some species grow on the outside of seeds, such as corn and barley or on fruits or in the soil.

- **Fusarium Oxysporum** is a parasite on green plants, peas, beans, cotton, tomatoes, corn, sweet potatoes and rice.

- **Helminthosporium** is found on cereal grain, plants, grasses (i.e. wheat, oats, rye, etc.)

- **Hormodendrum Cladosporioides** is found on decomposing plants, leather, rubber, cloth, paper, foods and wood products.

- **Penicillium Notatum** is found in soil, grows readily on fruits, breads, cheese, leather and fabrics and is not related to the antibiotic penicillin.

- **Phoma Betae** is found on books, paper, magazines, some green plants and some paints containing lead.

- **Pullularia Pullulans** is found on plastics, paints and caulking compounds.
Testing for Allergies

There are a variety of ways to test for allergies, including getting bloodwork done and/or getting skin tested. During your appointment with your provider, testing will be discussed if necessary and the appropriate test(s) for your needs will be ordered.

Treatment of Allergies

1. Environmental Controls

2. Diet

3. Medications

4. Immunotherapy
Environmental Controls

Take control of your environment

The first, most basic treatment step, once an allergen has been identified, is to eliminate or avoid it if possible. This is sometimes referred to as “avoidance therapy” or “institution of environmental controls”. Controlling the environment is often overlooked but generally a very useful modality in the treatment of allergic rhinitis and asthma. While it may not be possible to completely eliminate all of the allergens or substances that trigger your allergies, you can do a great deal to minimize exposure and thereby reduce symptoms.

Outdoors: (Pollens and Outdoor Molds)

Keep windows closed and use air conditioning

Avoid hanging clothes outside to dry

Avoid yard work in the early morning when pollen counts are higher

Use gloves and/or a mask when working outdoors

If time is spent outside during high pollen counts, change clothing and shower when you return inside. Place clothes worn outside in a closed lid hamper.

Wash hair daily before bed.

Keep rain gutters clear and correct drainage problems around the home to reduce moisture and mold growth.

Increased mold exposure in spring and fall

Increased mold exposure when gardening or mowing lawns especially when damp or rainy
In indoors: (Molds, House Dust, Dust Mites, and Animal Dander)

* Create at least one “allergy safe room” at home. This should be a room where you spend most of your time, most likely the bedroom. Place an appropriately sized room air filter, eliminate carpets, heavy drapery, fabric furniture and use dust mite covers for your pillows and mattresses. Exclude pets from the room. Apply any of the following tips to this safe room as you deem appropriate. These measures can significantly reduce your allergen exposure.

Molds:

Keep indoor humidity between 48 and 52 percent. You may need to purchase hygrometers that measure humidity and dehumidifiers or in rare cases even a humidifier if the air is too dry.
Clean up any water spills or leaks inside the home promptly and repair leaking faucets and drains. Periodically check foods stored in the refrigerator and discard anything that shows signs of spoilage or mold. Install exhaust fans in the bathroom and over the stove to remove excess moisture and other odors.

Dehumidifier in basement if humidity is greater than 50%

Change water daily in the humidifier.

Empty dehumidifier daily.

Lysol cleaner or Clorox and water (10% Clorox/water) to inhibit mold growth in the bathroom, shower, etc.

White vinegar and water can be used for cleaning. White vinegar may be used in sink drains and to clean the refrigerator.

Light in closet if damp

Reduction/elimination of house plants or fresh flowers in the home

Cover house plant soil with sand.

Avoid feather or down bedding.

Avoid highly scented products.

Pets should not be allowed in the bedroom.
Be aware of and avoid these sources of mold growth in and around your home:

Humidifiers, furnaces, radiators and air-conditioners.
Sauna baths.
Refrigerators: motor compartment, rubber seal molding and inside the unit.
Plumbing with condensation of water (to help improve this – wrap pipes with insulation).
Leaking plumbing.
Bathroom walls, shower, tubs and shower curtain.
Moist crawl spaces.
Basements (Waterproof the area, wrap bare cold water pipes and use a dehumidifier).
Moldy products, trash in house, basement, garage and outbuildings, attics.
House plants, herbarium, fish bowls, greenhouses and shrubbery close to the house.
Lawn mowing.
Woods, streams, ponds, lakes and puddles in your immediate environment.
Nearby mills, elevators or grain storage facilities.
Snuff, if inhaled.
Fireplace wood.
Libraries, books and magazines.
Bird roosts, pigeons, blackbirds and starlings.
Cosmetics.
Solar heating systems.

Dust & Dust Mites:

Avoid clutter and dust collecting knickknacks. Books, toys, objects and other items placed on shelves collect a lot of dust and can be very difficult to keep clean.

Keep floors bare or use washable throw rugs instead of area rugs and carpets. Use air filters. High Efficiency Particulate Arresting filters (HEPA) are very effective in cleaning the air in any given room. It is best to use a single unit for per room and it is best to concentrate on the bedroom where we tend to spend most of our time. When you look to purchase HEPA filters it is important to evaluate the capacity that the filter can clean. Be sure to purchase a filter that is big enough to clean the volume of the selected room. HEPA filters are available in most home improvement stores or can be ordered from an allergy supply company.

Avoid feather and wool bedding as these are places that dust mites infest. The use of dust mite proof covers for pillows and mattresses is very effective in minimizing dust mite exposure. There are many allergy supply companies that your doctor can help you find, where hypoallergenic pillow and mattress covers can be purchased. Use polyester filled pillows and replace them yearly. Wash blankets, quilts, and comforters in very hot water once a week to kill dust mites.

Put filters over forced air heating vents and change them regularly.
Dust mite covers for pillows, mattresses and box springs

Eliminate clutter & dust collecting knickknacks.

Dust bedroom using a damp cloth.

Avoid feather (down) and wool bedding.

Wash sheets and bedding at the minimum once a week in hot water or use hot dryer.

Keep floors bare, avoid carpeting when possible.

No venetian blinds.

Keep closet doors closed.

Remove unnecessary clutter.

No stuffed animals, books or magazines in the bedroom.

Put filters over forced air heating vents and change regularly. May use cheesecloth.

Change home heating filter and air cleaner filter regularly.

Keep pets out of the bedroom and off furniture.

Wash hands often especially after petting/grooming pets.

Animal Dander

If you are allergic to animals, it is best not to have animals in the house. Keep them outside if at all possible and also keep them out of your bedroom. When pets are inside, try to confine the animal to one room or area of your house. Bathe the animal frequently and wear a mask when you do so. Wash your hands after playing with the pet and do not rub your eyes or nose until your pet has been washed.
* Create at least one allergy–safe room in your home: bedroom

* Pets should not be allowed in bedroom
  Make sure your pet is brushed or groomed regularly. Use gloves when grooming pet or avoid brushing your pet yourself. Encourage a non-allergic family member to perform this task.

Limit or avoid kissing and hugging your pet as much as possible.

Wash your hands after handling your pet, especially before touching your eyes or face

Feed your pet a well–balanced diet; this may help to minimize hair loss, which may also help to reduce dander.

Keep litter boxes away from areas of air filtration vents.

Use gloves and mask when cleaning litter box or encourage non-allergic family member to clean litter box.

Clean and vacuum regularly using a vacuum cleaner with a HEPA filter

Provide good ventilation in your home, and use portable air purifiers with HEPA (high efficiency particulate air) filters throughout your home. Remember to change the filters

**Keep your car clean by vacuuming the seats and carpets regularly. Try to use auto air conditioning instead of opening windows during pollen seasons.**

**At Work**

Keep your work space uncluttered and dust it frequently. Piles of paper attract dust and mold. Do not decorate the work area with dried plants or flowers. Use HEPA filters to clean your office work space.

Environmental control measures are often an overlooked aspect of managing allergies. The results that you obtain can be very rewarding. Many of the ideas mentioned above are simple to accomplish and while these may require some initial expenditures they can have long lasting rewards in terms of keeping you healthy and feeling better. Remember that creating an allergy free haven in the bedroom can go a long way toward helping you sleep comfortably and control allergy symptoms. Also, there are a multitude of useful web sites that can be accessed merely by typing “allergy avoidance” into your search engine. In the long run, effective environmental control measures should keep you feeling better and healthy.
MOUSE AND COCKROACH ALLERGENS

Contrary to popular belief, it is not necessary to have infestations of mouse and cockroach in your house to be exposed to mouse or cockroach allergens. Primary culprits of exposure come from particles of feces from cockroach and from feces, urine, epithelium (skin cells), and dander from mice. These allergens become airborne as the particles dry.

Mouse and cockroach have been found to be components in house dust. Both mouse and cockroach contaminates can be found in fabric, foods, cardboard, carpeting and many other objects and materials that are brought into the home such as bedding, clothing and packages.

Cockroach allergens act similar to dust mite allergens. Environmental controls should be handled in the same manner, as a significant number of homes without infestation, have high levels of cockroach allergens in the home. Environmental controls would include dust mite proof covers for the mattress, box spring and pillow cases. Measures to cut down on dust collectables especially in the bedroom and vacuuming and dusting often would be advisable. Flooring would be preferred over carpeting whenever possible. A hepa filter for the bedroom and/or most frequently used room(s) and a hepa filter vacuum may be purchases to consider.

There is also exposure outside the home to consider as well. Exposure may be at work places, schools, restaurants and stores to name a few.

Food related exposure should also be considered. The FDA has set an allowable percentage of insect body parts to be present in some foods, particularly chocolate and coffee. Some other foods include, but are not limited to peanut butter, macaroni, fruit, cheese, popcorn and wheat.

Both mouse and cockroach allergens have been linked to triggering asthma in existing cases and, possibly, causing asthma in children.
**Diet**

*Diet has a significant impact on allergy symptoms*

A healthy balanced diet is a key component for optimal health.

In addition, there are concomitant foods that “cross react” with environmental allergies. These foods that cross react with pollens, dust and molds should be avoided or intake of them should be minimal during each season.

These concomitant foods all add to the “allergic load” and may cause increased allergy symptoms. The following list should be kept for a guide:

**Pollens:**

- **Trees – (spring)**
  - Milk, Mint, Lettuce, Eggs, Apples, Maple Products
- **Birch Trees-(spring)**
  - Almonds, Carrots, Celery, Cherries, Hazelnuts, Kiwis, Peach, Pears, Plums
- **Grasses- (summer)**
  - Legumes, Grains, Cereals, Breads, Celery, Melon, Oranges, Peaches, Tomatoes
- **Ragweed and other Weeds- (late summer until frost)**
  - Milk, Wheat, Mint, Melon, Chamomile, Sunflower seeds, Banana Lettuce, Cucumbers, Zucchini

**Dust:**

- Oysters, Other Seafood, Sometimes Nuts
**Molds:** (indoors year round; outdoors spring, summer, fall and winter when above freezing. Molds are usually worse outdoors in spring and fall)

Mold containing foods can increase symptoms (congestion, runny nose, headaches, increased post nasal drip and clearing of the throat, etc.)

**Mold Foods:**
- Coffee
- Chocolate (or any food containing cocoa as an ingredient)
- Cola Drinks (any soda drink that is dark in color)
- Nuts, including Peanut Butter
- Popcorn
- Corn on the Cob
- Beer (or all malt beverages), Wine
- Mushrooms, Onions, Garlic, Spices
- Cheeses or cheese containing foods, (especially aged cheeses)
- Vinegars

**Latex:**

Bananas, Avocado, Kiwi Fruit, Chestnut, Papaya

*Also be aware that there are histamine containing foods which when ingested cause the body to release histamine. Release of histamine can cause a wide variety of symptoms in the body (itchy skin, watery & itchy eyes, sneezing, rashes and or hives).*

**Histamine Containing Foods:**

Strawberries, Red Wine, Citrus, Cheese and Chocolate
Foods that contain the chemical tyramine can trigger headaches. Foods that may have large amounts of tyramine include: fish, chocolate, alcoholic beverages, cheese, soy sauce, sauerkraut and processed meat.

Fermented foods may cause allergy symptoms because they are either rich in histamine or because yeast or mold is involved in the fermentation process.

Learning about your allergies and the different food culprits both obvious and hidden will help you to modify your diet to avoid the offending foods.

In addition, you may have specific food allergies as well. You will need to discuss your symptoms with your provider to decide on the proper testing and treatment for your specific needs.

- Keeping a diet diary would be helpful

- The Caveman diet is recommended to get the “hidden foods” (corn, eggs, wheat, milk, sugar, soy and peanut) out of the diet. The Caveman diet is an excellent screening test for food allergy. You should discuss the Caveman diet with your provider before starting this diet.
Oral Allergy Syndrome

Oral allergy syndrome is an allergic (immunologic) reaction to certain proteins in a variety of fruits, vegetables and nuts, which develops in some people with pollen allergies and is referred to as Oral Allergy Syndrome because it usually affects the mouth and throat.

These reactions are typically not related to pesticides or metals. It is nearly always preceded by hay fever and tends to occur most often in older children and adults. It is usually associated with birch and ragweed pollen allergies, but it can also affect people with allergies to the pollens of grass and mugwort. These reactions can occur any time of the year, but are often worse during the pollen season involved. Symptoms may include itching and burning of the lips, mouth and throat, watery, itchy eyes, runny nose and sneezing. Some individuals report that peeling or touching the offending foods may result in a rash, itching, or swelling where the juice touches the skin. More serious reactions can include hives and swelling of the mouth, pharynx and trachea.

In rare cases, severe allergic reactions have been reported with GI and respiratory problems, as well as anaphylactic shock. Symptoms usually develop within minutes of consuming or touching food, but occasionally occur more than an hour later.

Most reactions are caused by raw foods, since the allergen in proteins are usually destroyed by cooking. The main exceptions to this are celery and nuts, which may cause reactions even after being cooked. Offending foods often include cantaloupe (and other melons) especially during ragweed pollen season, and kiwi, hazelnut, white potato, celery, parsley, beans and cumin. Interestingly, the allergic characteristics of some fruits seem to decrease during storage. Other offending fruits include apple, pear, plum, prune, peach, nectarine, apricot, cherry and banana.

It is recommended that offending foods be well-cooked, canned, or microwaved. Up to one-third of people with seasonal allergies may suffer Oral Allergy Syndrome. Further allergy evaluation is recommended.
CAVEMAN DIET

What is the “Caveman” Diet?
40,000 years ago our ancestors belonged to nomadic tribes, lived in caves for winter shelter and were hunter-gatherers. Their diet consisted of wild game, fish, roots, seeds, nuts, tubers and fruit. These were the foods that had been around for millions of years. This was the “Caveman Diet”.

Our genetic constitution has changed very little since then and so our digestive system is more likely to be able to produce the enzymes and digestive juices that allow us to digest and get nourishment from these basic foods as found in foods that were available to the cave person. They were not exposed to technology-dependent foods that are the basis of our modern diets.

It is obvious that we cannot go back to living in a cave or subsisting on the primitive hunter and gatherer’s diet. But we can try to learn where genes and habits collide.

How does this Diet work?
The “Caveman Diet” is an excellent screening test for food allergy. You should soon feel better, regain energy and even lose some weight. This diet is very cost effective. It is simply a diet limited to fresh fruits and vegetables and boiled or broiled meat, for 2 weeks. The only beverages allowed are fruit juice, vegetable juice and water.

The purpose of this diet is to get the “hidden foods” out of the diet: Corn, eggs, wheat, milk, sugar, soy and peanut, as well as chocolate, coffee, etc. These are foods to which people are most likely allergic. It is important to avoid all foods that have been in your diet three or more times per week. You may not have any fruit, vegetable, or meat to which you have been found allergic.

If allergy to food(s) is a big part of your problem, your symptoms will be significantly better within a two-week period.

Who may benefit from this Diet?
- Anyone seeking a self-test for food allergy.
- Anyone who has food allergies and/or wants to find out if they have others.
- Anyone who has been on allergy shots for three months and is not at least 50% better.
- Anyone who is interested in finding out if altering their diet will affect how they feel.
- Anyone wanting to lose weight quickly.

What do you need to do?
Do-it-yourself food testing is done by diet manipulation- the “Caveman Diet”. This may be the best and perhaps the most accurate means of diagnosing a food allergy. Unfortunately, this can be very time consuming and you must do all the work. In order to have any validity, all suspect foods must be totally eliminated for 2 weeks to see if symptoms disappear. It then takes several days back on that food to see if your symptoms recur. The process has to be repeated for each food one at a time.
The Caveman Diet

<table>
<thead>
<tr>
<th>DO EAT</th>
<th>DON’T EAT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meat/Fish</td>
<td>Grains</td>
</tr>
<tr>
<td>Fruits</td>
<td>Beans</td>
</tr>
<tr>
<td>Vegetables</td>
<td>Potatoes</td>
</tr>
<tr>
<td>Nuts/Seeds</td>
<td>Dairy</td>
</tr>
<tr>
<td>Berries</td>
<td>Sugar</td>
</tr>
</tbody>
</table>

Why can’t I eliminate just one food at a time?
You probably have several food allergies. If you omit just one food then you are probably omitting only a small percent of your food allergies (allergens). Consequently not enough of your symptoms will go away for you to experience any change in the way you feel. Do your best to omit 100% of the suspect foods all at once; then when you reintroduce a food that your body doesn’t want – you know it will raise a fuss.

Why no grains on this diet?
Most people with allergies are allergic to grains, especially wheat. Can you ever eat grain again? Probably. Avoid grains for a while, then add them back slowly, rotate your foods and get more variety in your meals. Hopefully you’ll be able to eat grains again in moderation. Can you eat rice or oatmeal? If you feel you can’t give up all grains, then at least avoid wheat in any form.

Can you eat yogurt?
Avoid all milk products: Low-fat milk, all cheeses, cottage cheese, cream cheese, non-fat dry milk, kefir, yogurt, and butter.

What about Salt? Oil?
Use sea salt. Commercial salts may contain dextrose and aluminum. Use cold-pressed oils.

Why no eggs?
Eggs are one of the top allergens because we’ve eaten too much of them too often.

What? No peanuts?
Peanuts are not a nut, they belong to the legume (bean) family, they are also very moldy and highly treated with chemicals.

What are the best ways to prepare foods?
Most veggies are best raw or steamed, use the crock pot for soups and stews. You may “steam” veggies in the microwave. Fish is best poached, steamed, sautéed or baked. Avoid deep-frying. Chicken or turkey can be baked, sautéed or stewed in a pot.

Can I use spices & seasonings?
Try not to. You can be just as allergic to spices as to food.

What about artificial sweeteners?
Avoid all artificial sweeteners since they contain sugars and/or lactose (milk sugar).
The “Caveman Diet” Screening Test for Food Allergy

You may eat all you want of the following:

1. **Meats:** Lamb, venison, chicken, turkey, duck, pheasant, quail, rabbit and all fish.
2. **Fruits:** Apples, cherries, pears, peaches, melons, cucumbers, tomatoes, bananas, avocados, plums, citrus fruits, olives, figs, dates, mangos, kiwi, pineapple, or any other fresh fruit whenever possible.
3. **Vegetables:** Lettuce, cabbage, kohlrabi, kale, rhubarb, cauliflower flowers, broccoli, asparagus, parsley, herbs, spinach, celery, carrots, onions, mushrooms, greens and any other part of a plant that is edible raw.
4. **Nuts:** Almonds, walnuts, pecans, Brazil nuts, acorns, hickory nuts, filberts, macadamia and other nuts that are edible raw.
5. **Berries:** Grapes, blueberries, raspberries, blackberries, boysenberries, strawberries and other fruits that are edible raw.

Do not eat:

1. **Grains:** Corn, wheat, barley, rye, rice, oats and all products made from them.
2. **Beans:** All varieties of hard beans, lima beans, green or wax beans, peas, peanuts, chocolate, soy and products made from them.
3. **Potatoes:** All varieties of potatoes and yams, beets, taro, cassava (tapioca), turnips and the products made from them.
4. **Dairy:** Milk, cheese, yogurt, whey, butter and all products made from them.
5. **Sugar:** Fructose, sucrose, maltose, dextrose, lactose, corn sweeteners, honey, molasses and associated products.

This primitive diet is an excellent screening test for food allergy. It is simply a diet limited to fresh fruits and vegetables and boiled or broiled meat, for two weeks. The only beverages allowed are fruit juice, vegetable juice, and water. This gets out of the diet the most frequent food offenders, typically corn, egg, wheat, milk, soy and peanut. The immune complexes/food antigens are metabolized/excreted within two weeks, and if food intolerance is a big part of your problem, symptoms will be significantly better.

Some additional tips:

1. Eat all you want of: Fresh fruits (frozen, if home prepared, or in plastic bags from the grocery store). Fresh vegetables (or as above). Broiled, boiled or baked meat, but do not eat meat more than one time per day. Drink pure fruit juice, vegetable juice and water (bottled or filtered is better).
2. You may not have any prepared food products (boxed mixes, etc). You may not have cake, cookies, candy or soft drinks. You may not have any grains (including rice and soy) or peanuts. You may not have any dairy products: milk, butter, margarine, cheese, yogurt, ice cream, etc. You may not have any fruit, vegetable or meat to which you have been found allergic. Fruit “drinks” contain corn syrup and are NOT allowed.
3. Although corn is often considered a vegetable – it is actually a grain and is to be totally eliminated.
4. The purpose of this diet is to get the “hidden foods” out of the diet: corn, eggs, wheat, milk, sugar, soy, peanut.. as well as chocolate and coffee, etc. as these are the most likely culprits for your allergies.
Medications

Treating Symptoms

Some of your symptoms may be well controlled on a medication regimen suggested/prescribed by your physician. Medications that can be used to treat allergies can be over the counter (OTC) medications and/or prescribed medications. Depending on the symptoms the doctor may recommend that you use nasal sprays, medications by mouth, eye drops or nasal rinses. Sometimes nasal rinses with saline are recommended without medication which may be very helpful to relieve some of your allergy symptoms.

If you have any concerns or questions regarding your medications please discuss with an allergy nurse or your provider.

- **Antihistamines** – a medication used to stop the release of histamines in response to exposure to known allergens, colds and in the event of an allergic reaction. They come in the form of nasal sprays, eye drops and oral route (liquid & tablets). Examples of antihistamines include Benadryl, Zyrtec, Claratin, Allegra, Astelin and Astepro nasal sprays and Patanol eye drops to name a few. Please be mindful that some antihistamines can make you drowsy. Use with caution.

- **Decongestants** – a medication that can be used to relieve congestion, swelling and general discomfort of the sinuses. Decongestants should be used with caution if you have any cardiac history. They can be taken along with antihistamines and come in oral and nasal form. The nasal sprays should not be used for more than a few days since it can lead to more swelling and congestion with prolonged use. You should have a discussion with your provider prior to using any decongestants.

- **Nasal Sprays** – Available both OTC (over the counter) and by prescription can be helpful in reducing nasal inflammation and reducing allergic rhinitis.
➢ There are other medications that may also relieve allergy symptoms such as Singular.
➢ Some medications are meant to be taken regularly, for at least a certain period of time, and other medications may be used as needed. Sometimes it may take trialing several different medications to find the one(s) that work best for you. It is wise to have a discussion with your provider prior to taking any medication including OTC (over the counter) medications.
Immunotherapy

Allergy Injections and Sublingual Drops

Immunotherapy is a program designed to combat your personal allergies. Commonly referred to as "allergy shots & allergy drops", the purpose of immunotherapy is to desensitize you to your allergic sensitivities. Your allergy test results are used to create a mixture of these substances, customized according to the things to which you are allergic and the level of sensitivity you have to each one of these substances. Sterile extracts will be prepared from allergy-producing substances such as pollens, mold spores, dust mite and animal dander. These biological substances are injected or taken under the tongue in increasingly stronger doses on a regular schedule until your maximum dose has been achieved or tolerated. (Initially once a week for injections and once a day for drops.)

Immunotherapy is often used in addition to environmental controls and allergy medications to help eliminate your allergy symptoms. It is most effective for those allergies caused by substances you breathe in such as pollens, mold spores, house dust and animal dander.

How Does Immunotherapy Work?

Allergies to substances you inhale are caused by your body producing excessive antibodies (IgE antibodies) toward these substances when you are exposed to them. When you are re-exposed to these substances, you experience allergic symptoms. Immunotherapy is designed to block your body’s production of allergy antibodies and stimulate production of protective antibodies, thereby eliminating your allergy symptoms.

Summary of Immunotherapy

Immunotherapy is the only treatment specific to the actual allergy; all other treatments are directed at relieving allergy symptoms rather than stimulating the immune system. Literally hundreds of millions of allergy shots have been given during the past hundred years that this technique has been in use, and this method of treating allergies has been highly successful for a great number of people. Sublingual Immunotherapy has also been given for many years with comparable results. There is no true “cure” for allergies but immunotherapy can have a very beneficial effect on the health of an allergic person.

Allergies develop over a period of time by repetitive exposure to allergy producing substances. Immunotherapy is a long term program that utilizes the body’s response to counteract the production of allergic symptoms. If you follow your doctor’s instructions carefully and take your shots on a regular schedule, your general health and quality of life can be greatly improved.
Subcutaneous Immunotherapy “SCIT” 
Allergy Shots

What can I expect from my allergy shots?

In most patients, as the strength of the treatment dose is increased, they will experience relief of symptoms after the injection and eventually the majority of their symptoms should be controlled from shot to shot. Many times this symptom relief is gradual as opposed to being dramatic and patients may not notice how much these shots are helping them. Symptom relief may wear off before you get your next injection, and in this case, your doctor may choose to shorten the interval between injections. For example, if the effects of the shot wear off by the 5th day, your doctor can elect to give your shot at 5 day intervals. Likewise, the interval between shots can be lengthened if you determine relief does not wear off between shots. It is important that you note the effect of each shot and report your response at the time you get your next shot.

Small dilute doses are necessary at the beginning in order to allow your immune system to build tolerance to the shots over a period of time. As the doses are increased at regular intervals, you should become less sensitive to the substances that cause your allergy symptoms. The dose that provides you with the most symptom relief or the maximum dose you can tolerate without a reaction will become your maintenance dose and you will continue to receive this maintenance dose at regular intervals. Your maintenance dose is established based on how well you are able to tolerate the shots which, in turn can be dependent on how much pollen, mold or other allergy producing substances are in the air you are breathing during that particular time of year.

Sometimes a patient has to be held at a lesser dose until the allergy season passes, though doses can subsequently be increased to provide protection for the next allergy season. Occasionally a maintenance dose must be decreased during the allergy season as the additional “allergic load” is too much for some people to tolerate along with their shots at full dosage levels.

In some situations your shots may have to be temporarily discontinued during times of infection, high stress or uncontrolled medical problems. If you are more than seven days late for your shots, it will be necessary to reduce the dosage and “build up” again over a short period of time.

First Visits:

- You will need to avoid your antihistamine(s) prior to your first visit.
- You will need to come between 5 and 7 days when you first begin injection(s). You will get one to four injections each visit, depending on the number off allergies being treated.
- You will need to wait thirty minutes for the next ten visits, after your initial visit, until you reach your maintenance dose.
- You will no longer need to wait after your injections, once on your maintenance dose.
- You will be advised to continue to come weekly for the first year unless otherwise directed.
Note:

During treatment, sometimes vial(s) will need to be made stronger. If your vial(s) need to be made stronger, you will need to repeat the initial protocol, including waiting thirty minutes after each shot, during escalation. The number of times, if any, vial(s) need to be made stronger varies from patient to patient during the 4-5 year treatment period.

What are some of the side effects?

Your shots may have a slight sting that subsides quickly. A small local reaction at the injection site consisting of redness and swelling is not unusual. A local reaction greater than 2 inches in diameter or persisting for more than 48 hours is an indication to adjust your treatment dose or to use medications to control these symptoms. Occasionally, patients experience increased allergy symptoms shortly after receiving their injection. Since allergy shots are made from common biological sources, it is considered safe to administer these shots at established maintenance dosing during pregnancy.

How long will I have to get shots?

Most patients stay on immunotherapy for four to five years. Younger patients stand a better chance of discontinuing shots than do older patients. The rule of thumb is to stay on the shots until your symptoms have been controlled or minimized for two consecutive allergy seasons. When this point has been reached, you can consider discontinuing immunotherapy. Your doctor and nursing staff can help you with this decision and may advise you to taper off or continue injections at 10-28 day intervals. If your symptoms recur during this lengthened interval, you are not ready to discontinue the injections.

Remember, if you are more than seven days late for your shots, the doctor or the doctor’s staff will have to determine a safe dose at which to restart your therapy.
Things to Remember:

- You do not need an appointment for your injections.
- You do need to see your provider every 6-12 months to review your SCIT progress.
- You do not usually need to stop your antihistamines when getting shots.
- You only need to stop your antihistamines for first shot visit and any time your vial is being adjusted.
- You will be advised by the allergy staff when you need to temporarily stop your antihistamines.
- You need to inform allergy staff if you start any new medications. Certain medications are contraindicated while getting allergy shots.
- Regular compliance with your allergy schedule ensures best chance of optimal results. Of course adjustments can be made for vacations, etc.
- Typically, injections are weekly for the first year, every other week for the second year, every three weeks for the third year and every four weeks for the fourth year. This may vary. Your individual schedule will be discussed at your follow up appointments with you provider.
- Avoid strenuous exercise for two hour prior and two hours after your injections.
- Please inform allergy staff if there is a possibility of pregnancy.
- Please inform the allergy staff, the day of your injections, of any of the following: current illness, fever greater than 101F, current or recent rash, asthma symptoms, recent use of rescue inhaler or shortness of breath.
  Please inform the allergy staff, the day of your injections, if you had any other shots (flu, etc.), received intravenous contrast or had any procedure(s) that day.
  Please inform the allergy staff, the day of your injection, if you had any difficulty, had any arm reactions or any increased symptoms after your last injection(s).
SUBLINGUAL IMMUNOTHERAPY “SLIT”
Allergy Drops

Sublingual Immunotherapy – What is it?
Sublingual Immunotherapy is an individually tailored program designed to combat your specific allergies. Your allergy test results are used to create a mixture of substances to which you are allergic. Extracts are prepared from allergy producing substances such as pollens, mold spores, animal dander and dust mite. The drops work similar to shots, desensitizing you to the substances causing your allergy symptoms. The drops are placed under your tongue once a day. Sublingual Immunotherapy is often used in addition to environmental controls, diet, and allergy medications to help eliminate or decrease your allergy symptoms.

How does Sublingual Immunotherapy work?
Allergies to substances you inhale are caused by your body producing excessive antibodies (IgE antibodies) toward these substances when you are exposed to them. When you are re-exposed to these substances, you experience allergic symptoms. Immunotherapy is designed to block your body’s production of allergy antibodies and stimulate production of protective antibodies, thereby eliminating your allergy symptoms over time.

Who should take allergy drops?
Although most allergy sufferers can benefit from allergy drops, sublingual immunotherapy is especially ideal for people who can’t tolerate allergy shots or for those who are unable to commit to allergy shot therapy.

Are allergy drops safe and effective?
Allergy drops have been used around the world for over sixty years. Research shows allergy drops are safe and effective for people of all ages. The World Health Organization has endorsed sublingual immunotherapy as a viable alternative to injection therapy.

Does medical insurance cover allergy drops?
Insurance companies do not cover allergy drops. The allergens used for allergy drops are the same as those used for injections. The U.S. Food and Drug Administration (FDA) has specifically approved the use of these allergens for injection use. Using them for allergy drops (sublingually) though is considered an “off label” use which means that they are not specifically approved by the FDA for this purpose. Off-label use in the US healthcare delivery system is a legitimate, legal and common practice though may often times be interpreted by insurance plans as investigational and experimental. Because of this, insurers do not cover these costs despite the fact that the efficiency of this treatment has been confirmed in peer review journals and has been prescribed for this use worldwide for decades.

Most insurances cover the cost of office visits and testing. If the cost of allergy drop treatment is affordable, the benefits and convenience of this therapy may be deciding factors.
**How long will I need to take drops?**

Most patients take allergy drops for three to five years, many patients will feel improvement within a few months. Although it is tempting to stop treatment once you start feeling better, it is important to complete the full course of treatment to benefit the long term effects.

**Getting Started:**

You would need to come to the office for a nurse visit to start your allergy drop treatment. You will take your first drop in the office and will wait for thirty minutes after your drop is taken. A nurse will go over necessary information and protocols with you at that visit. It will be necessary for you to return to the office for three more nurse visits, three weeks apart, while your dose and strength of the drops are increasing.

After that initial three month period, you will reach your maintenance dose. You then may have your drops mailed to your home. Maintenance bottles last for three months.

If you stop your drops for longer than three days, you should call our office for instructions on how to restart them. After you start, you need to see your provider at twelve weeks and then every six months while on treatment.

**Side Effects?**

Side Effects are not common from allergy drops. Occasionally, a person may experience itching in the mouth, swelling under the tongue, upset stomach, rashes, etc. It is necessary to always carry an Epi Pen and an antihistamine with you while on allergy drop therapy. Rarely symptoms of an anaphylactic reaction may occur. Always call the office if experiencing any symptoms or concerns.

Drops should be discontinued in the presence of any open mouth sores, ulcers, cuts in your mouth or recent oral surgery.

**Summary:**

Immunotherapy is the only treatment specific to actual allergy; all other treatments are directed at relieving allergy symptoms rather than stimulating the immune system. There is no “cure” for allergies but immunotherapy can have a very beneficial effect on the health of an allergic person.

Sublingual immunotherapy, compared to shots, is more convenient by eliminating weekly office visits. Typically, monthly cost of drops is comparable to medication co-pays. Our patients report and research confirms that most patients find they need less medication to control symptoms after beginning allergy drops.

The end result is to feel better, use less medication, have fewer office visits and/or hospitalizations, less time lost from work and school after taking drops consistently.
Reactions to Immunotherapy

In addition to possible localized reactions to immunotherapy, a generalized reaction may occur.

Generalized reactions involve your whole body. Systemic reactions occur rarely but are important because of the potential danger of progression to severe anaphylactic conditions:

1) Urticaria (hives)
2) Angioedema (swelling of any part of the body, such as tongue, lips, throat or face): If swelling progresses, the principal danger lies in suffocation due to airway swelling. Angioedema usually occurs within minutes of taking a dose and requires immediate emergency medical attention.
3) Anaphylactic Shock: This is the rarest complication. It is a serious event characterized by wheezing, low blood pressure, unconsciousness and potential death. This event requires immediate use if epinephrine auto injector (Epi Pen) and immediate emergency medical attention. (Call 911)

Anaphylaxis symptoms usually occur within minutes of exposure to an allergen. Sometimes, however, anaphylaxis can occur a half-hour or longer after exposure. Skin reactions, including hives along with itching, and flushed or pale skin are almost always present with anaphylaxis. Other symptoms may be a feeling of warmth or the sensation of a lump in your throat. Constriction of the airways and a swollen tongue or throat can cause wheezing and trouble breathing and swallowing; a weak and rapid pulse, nausea, vomiting or diarrhea; dizziness or fainting. An anaphylactic reaction can be life-threatening when a severe attack occurs. It can stop breathing or stop your heartbeat. In this case, injectable epinephrine (Epi Pen), antihistamines, cardiopulmonary resuscitation (CPR) and other emergency treatment is needed immediately. Call 911 or emergency medical help. Sometimes the reaction can be “bi-phasic” with a second episode soon after the first, requiring additional administration of epinephrine.

If you are undergoing sublingual immunotherapy (SLIT), you are required to carry an Epi Pen with you at all times. Though it is very unlikely an Epi Pen would need to be used, it is a necessary safety precaution. It is necessary to learn how to use the Epi Pen. If you do use the Epi Pen, you must go immediately to an emergency room or call 911.

Regularly check that you have a spare Epi Pen available. Regularly check that your Epi Pens have not “expired.”

For additional information, please review the following links:
www.epipen.com : VIDEO on HOW TO USE EPI PEN
http://www.auvi-q.com
www.foodallergy.org
Hives All About

Hives (urticaria), those blotchy patches of red, slightly elevated skin (wheals) that blanch or whiten when touched, affect one person in five and are likely to develop as a result of eating certain foods or in conjunction with viral infections. They are usually intensely itchy, especially when located in areas covered by hair or in the webs of toes or fingers.

The acute form of this disorder follows release of histamine by the body’s mast cells. Onset of the acute form of hives may be dramatically swift, with symptoms showing within minutes of exposure to a causal agent. The original wheals fade rapidly, but they also tend to migrate.

Hives may show up as part of a more general or systemic reaction with anaphylactic shock a possibility. Consequently, the appearance of hives should act as a signal to watch closely for the appearance of other, possibly lethal, signs.

When these lesions persist for more than six weeks, the condition is termed chronic. What provokes the chronic form of hives is much more difficult to establish and in about 70-80% of cases no cause is ultimately found.

Hives can also be associated with numerous chronic diseases, including hyperthyroidism, systemic lupus erythematosus, juvenile rheumatoid arthritis, lymphoma and some cancers.

The mainstay of treatment is an antihistamine to reduce itching. For very serious cases of chronic hives, your doctor may also prescribe Cimetidine, a drug that has generally been used to treat acidity

<table>
<thead>
<tr>
<th>Category</th>
<th>Principal Offenders</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food</td>
<td>Eggs, peanuts, nuts, chocolate, berries, seafood, tomatoes, milk, cheese and yeast</td>
</tr>
<tr>
<td>Food additives</td>
<td>Tartrazine and benzoates</td>
</tr>
<tr>
<td>Drugs</td>
<td>Penicillin, aspirin, and sulfonamides, in particular; almost all other drugs possible</td>
</tr>
<tr>
<td>Insects</td>
<td>Bites, stings and body material</td>
</tr>
<tr>
<td>Inhalants (rarely)</td>
<td>Pollens, dust, mold and animal dander</td>
</tr>
<tr>
<td>Infections</td>
<td>Viral infections, parasitic infestations, hepatitis and abscessed teeth</td>
</tr>
<tr>
<td>Systemic disease</td>
<td>Rheumatic disorders, hyperthyroidism and certain malignancies</td>
</tr>
<tr>
<td>Psychological factors</td>
<td>Extremes of tension, stress and anxiety</td>
</tr>
</tbody>
</table>

associated with ulcers. For chronic relentless cases, steroids may be used.
Pyrethrum

Pyrethrum is a common constituent of insect sprays and powders. It is the dried, powdered flower of the pyrethrum plant, a member of the Chrysanthemum family. Most pyrethrum used in this country comes from Japan or California. The most common use of pyrethrum is in the non-poisonous insecticides, particularly for moth-proofing carpets, draperies and upholstery and to prevent the growth of various other insects in these materials. It is also used in some insect sprays for the house and garden as well as used for some products for pets.

Pyrethrum is occasionally found in medicine, including ointments, particularly for parasites on the human skin and that of animals. Occasionally, it is used in medicines administered internally, particularly for intestinal parasites (worms).

Avoidance of pyrethrum at home is usually easy. Away from home, as in the houses of others, theaters and other public places, avoidance may be difficult. Upholstery and draperies of movie theaters where moths are apt to congregate because of the darkness are often impregnated with pyrethrum. It is highly advisable for the pyrethrum sensitive patient not to go into rooms or closets which have been moth-proofed until well aired out.

Pyrethrum allergy may be seasonal due to the fact that the materials are used seasonally.

In addition to avoiding pyrethrum, the ordinary type of moth ball or flakes used to repel moths should be avoided because they are usually made of paradichlorobenzene, the odor of which is particularly irritating to individuals with respiratory allergies. This is true whether or not the individual can detect the odor.