ALLERGIES IN PETS

Hay fever symptoms, and allergies in general, are extremely common in people. Pets get allergies too, though their symptoms are different. Pollens, molds, mildews and dust mites cause sneezing, congestion, coughing and eye irritation in humans. In dogs and cats, itchy skin is more common, especially the skin of the face, feet or legs, and ears. In pets and people, this form of allergy is called **atopy**. Dermatitis (skin inflammation) caused by atopy is called atopic dermatitis.

Atopy is reported to affect between 3 and 15% of the dog population. Up to 80% of dogs with atopy are also allergic to fleas and up to 30% are allergic to foods. Itchy cats, who will often groom themselves excessively and develop bald patches of skin on their legs, back or belly, have atopy 15-17% of the time, and food allergies 13-17% of the time. Many cats have both problems.

The tendency toward allergies is genetic, so atopy can run in families and be more common in certain breeds of dogs. The risk of a human infant developing atopy is 37% if one parent also has atopy and 62% if both parents do. If you are purchasing a puppy from a breeder, ask about the history of allergies in the parent dogs and their parents as well. If two or more parents or grandparents had skin or ear problems it may be best to choose a different litter.

Pollen allergy tends to be seasonal. Ragweed blooms in late summer and fall, and is a common allergen for both people and pets. Itching from ragweed will usually be most severe in August and September. Tree pollen is most prevalent in the spring, and summer brings grass and weed allergies. If a pet is itchy or gets ear infections throughout the year, indoor allergens like molds and dust mites may be the problem. These environmental allergies – caused by tiny spores we and our pets inhale and get on our skin – usually start to appear when a dog or cat is 2-5 years old. It takes a couple of seasons' worth of exposure for the immune system to start to overreact to things. Once it starts, atopy tends to slowly worsen year by year.

Ear infection, or **otitis**, is common in pets with allergies. Recurrent otitis, especially yeast otitis, usually means the dog has an underlying allergy. 90% of food-allergic dogs have otitis, and 20% have otitis as their only symptom. 50-80% of atopic dogs have otitis.

Secondary Staph infections: Many allergic dogs develop secondary skin infections



caused by Staphylococcus, or "Staph" bacteria. Once the skin is inflamed and unhealthy, the normal skin bacteria invade into deeper skin layers, resulting in pustules or circular, red skin patches with crusting around the edges. Antibiotics and antibacterial topical products are used to treat these infections.

Skin parasites, such as Sarcoptic mites and fleas, can cause itching that resembles atopy. Flea Allergy Dermatitis, or FAD, is another common allergy syndrome that can occur alone or along with atopy. You may not see many fleas, as one flea bite a month is enough to keep some flea-allergic pets itchy all the time. Mites are microscopic and cannot be seen with the naked eye. We will commonly treat for these parasites along with treating the suspected allergy. All atopic dogs should be on external parasite prevention year round. The last thing an already itchy pet needs is mites or fleas!

Other factors: Dry skin in winter, hot and humid weather in summer, water in the ears from swimming and insect bites can all influence the health of the skin and worsen allergic disease. Gnats commonly bite dogs on their bellies while flies tend to bite the ear flaps. Cats can develop mosquito bite allergy, which typically causes inflammation of the nose and face. Hypothyroidism, or low thyroid level, is common in dogs and contributes to skin diseases. It's extremely important to rule out or treat other contributing causes for itching or other allergy signs.

Exposure to allergens - the pollens, mold or mildew spores or dust mite droppings that trigger the symptoms - can occur via contact with the skin, the lining of the respiratory tract or the lining of the gastrointestinal tract – anywhere our bodies touch the outside world. The skin route is the most common, so wiping the face and paws when a dog comes in from outside can remove accumulated pollen and sometimes helps to decrease symptoms. A healthy intestinal tract lining acts as a barrier to food allergens and pollens as well.

Allergies have been linked to low numbers of good intestinal bacteria such as lactobacilli and bifidobacteria. Probiotic supplements containing lactobacilli reduced intestinal permeability in children with atopic eczema and food allergy, in other words leading to a healthier intestinal immune system and fewer allergens entering the body via the intestinal lining. Probiotics may be a helpful form of treatment in pets as well.

It's a common misconception that food allergies occur when the pet eats something new. Just like atopy, however, it takes at least a few months of exposure to trigger an allergic reaction.

Proteins are more likely to stimulate allergy than fats or carbohydrates. It's another misconception that the most common allergens are wheat and soy. Proteins such as beef, chicken or dairy products are actually much more common Despite what some pet food companies want you to believe, allergic reactions to grains are rare.

culprits. Unlike atopy, which almost always starts when a pet is 2-5 years of age, food allergies have been documented to develop in pets as young as two months old and as old as thirteen years.

Atopy and food allergy frequently occur together In both humans and dogs. 25% of people with atopic eczema also have allergies to certain foods. Controlling the food

allergy component by feeding a hypoallergenic diet often dramatically reduces the amount of itching in dogs. Special prescription diets made especially for food allergic pets are FDA tested and proven to be effective at reducing symptoms in food allergic pets.

Pet food store brands rarely work well, as they usually contain too many ingredients a pet could be sensitive to, are poorly regulated, and are completely untested to see if they really work. Many times ingredients that could cause problems are not listed on the label. For example, the food may list duck as the primary meat source but 40% of pet foods tested contained meat protein not listed on the label. If the calcium source, listed as just "calcium," is cow bones, the food still contains beef. If the pet is allergic to beef, which is common, it will still have an allergic reaction to the food. The label may not list corn, but corn oil may be sprayed on the food to keep the nuggets from sticking together. The bag may say "no preservatives added" but the vitamin mix used in the food may contain preservatives – the company just didn't add any extra to what was already there! Work with your veterinarian to diagnose and treat allergies, not a pet store employee.

There are many allergy treatments for pets, including antihistamines, fatty acids, steroids, Atopica[™] (cyclosporin), Apoquel[™], Cytopoint[™] and immunotherapy. Injectable, oral and topical medications may be prescribed. Recurrent ear and skin infections caused by the allergy need treatment as well. There is a lot of variability as to which products work the best in which pets – this is probably due to genetic factors but we don't have good tests yet to be able to tell for sure. Allergy treatment is, at this point in time, a process of trial and error.

Unlike some disease problems, which draw little financial or research support, allergy is a hot research topic in both humans and pets. We are seeing new and improved products coming out all the time that help us to address this very common problem. Unfortunately, being common doesn't make it less difficult or frustrating. There are few things more miserable than a severely itchy pet or person. Call us if you notice any problems with your pet's skin, coat or ears!