What are antihistamines?

Antihistamines are a class of drugs which block the effects of histamine, a chemical produced by the mast cells and basophils in response to a real (bacteria/virus/fungus) or perceived (allergen such as dust) invasion.

Histamine binds to receptors (docking stations) on certain cells (H1), which triggers several responses such as dilation of the blood vessels, which causes fluid to leak into nearby tissue (runny nose, watery eyes for example) as well as inducing itchiness and smooth muscle contraction, which can lead to breathing difficulty due to bronchodilation. Antihistamines work by competing with histamine to bind to the receptors on the cells. Interestingly, allergies in humans more commonly produce sneezing, runny nose, and watery eyes whereas cats more commonly develop skin disorders such as itching and rashes.

Antihistamines may be first generation or second generation. First-generation often cause drowsiness, whereas second-generation don’t. Second-generation are less likely to cause drowsiness, are longer acting but more expensive to purchase.

Symptoms:

This can vary depending on the underlying cause but it is common for allergies in cats to affect the skin. Depending on the cause, symptoms may be seasonal or non-seasonal. Common symptoms may include:

- Itching and scratching
- Urticaria (rash)
- Crusty lesions on the back, close to the base of the tail (miliary dermatitis)
- Overgrooming
- Hair loss
- Vomiting and/or diarrhea (with food allergies)

Diagnosis:

This may depend on the type of allergy your veterinarian thinks your cat may have. There are four types of allergy to affect cats:

- Insect – The most common type of allergies in cats are insect bites or stings, predominantly fleas, however, any biting or stinging insect has the potential to cause allergic reactions in cats.
- Inhalant – The second most common type of allergy to affect cats. Responsible allergens include pollens, cat litter, smoke, dust mites, and moulds.
- Food – The most common food allergies in cats are to beef, fish, chicken, eggs, and wheat.
- Contact – The least common of the four groups of allergies to affect cats. This may be due to contact with an irritant (such as a chemical) or with an allergen including plants, cat litter, topical medications, shampoos etc.

Food trials: If your veterinarian suspects your cat has a food allergy, a food trial will be carried out. The cat is
switched to a novel protein (such as duck, or lamb) to see if symptoms improve. If they do, your cat will then be put back on his regular diet to see if symptoms return.

**Intradermal allergy testing:** This may be necessary for other types of allergy to determine the cause. An area of skin on the belly is shaved, a number of allergens are then injected into the skin. If your cat has an allergy to a specific allergen, small red hives will appear.

What is dosage for antihistamines?

When purchasing antihistamines, make sure they contain no other ingredient and never mix medications unless your veterinarian has said it is safe to do so.

**Dosage is for a 5kg or 11-pound cat.** Always check with your veterinarian before administering any medications to your cat.

A number of the antihistamines listed below are for *off-label* use in cats although they are commonly prescribed by veterinarians.

<table>
<thead>
<tr>
<th>Product</th>
<th>Dosage</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Atarax (Hydroxyine) 10 mg tablet</td>
<td>5 mg (1/2 tablet)</td>
<td>2-3 times a day</td>
</tr>
<tr>
<td>Benadryl (Diphenhydramine) liquid</td>
<td>10 mg</td>
<td>Twice a day</td>
</tr>
<tr>
<td>Claratyn (Loratadine) 10 mg tablet</td>
<td>5 mg (1/2 tablet)</td>
<td>Twice a day</td>
</tr>
<tr>
<td>Iramine (Chlorpheniramine) 4 mg tablet</td>
<td>2 mg (1/2 tablet)</td>
<td>2-3 times a day</td>
</tr>
<tr>
<td>Periactin (Cyproheptadine) 4 mg tablet</td>
<td>2 mg (1/2 tablet)</td>
<td>2-3 times a day</td>
</tr>
<tr>
<td>Phenergan (Promethazine)10 mg tablet</td>
<td>5 mg (1/2 tablet)</td>
<td>Twice a day</td>
</tr>
<tr>
<td>Polaramine (Dexchlorpheniramine) 6 mg tablet</td>
<td>6 mg (1 tablet)</td>
<td>Twice a day</td>
</tr>
<tr>
<td>Zyrtec (Cetirizine) 10 mg tablet</td>
<td>5 mg (1/2 tablet)</td>
<td>Once a day</td>
</tr>
</tbody>
</table>

**Atarax (Hydroxyine) – 10 mg tablet**

*Dosage:* 1/2 tablet 2 to 3 times a day.

*Uses:* Allergy, urticaria.

*Side effects:* Drowsiness, increased thirst.

*Contraindications:* Not safe for use in pregnancy, do not use in cats with urinary or gastrointestinal obstruction or heart disease.

**Benadryl (Diphenhydramine) – Liquid (also comes in injectable form and can be compounded into a transdermal paste)**

*Dosage:* 10mg twice a day.

*Uses:* Allergies, urticaria, motion sickness and dry up nasal secretions in cats with the flu.

*Side effects:* Drowsiness, urinary retention, dry mouth and in some cases gastrointestinal disturbances. These tend to wear off in time.

*Contraindications:* Use with caution in cats who have hyperthyroidism, high blood pressure or heart disease. Do
not give Benadryl to pregnant or lactating cats unless your veterinarian has told you to do so.

Claratyne/Claritin (Loratadine) – 10mg tablet (do not use the liquid as it contains propylene glycol)

Dosage: 1/2 tablet twice a day.

Uses: Allergies, urticaria.

Side effects: Nausea, urinary retention, gastrointestinal disturbances and in some cases drowsiness may develop although this is less common with second-generation antihistamines.

Contraindications: Check with your veterinarian if your cat is pregnant or lactating, suffers from asthma, liver or kidney disease.

Iramine (Chlorpheniramine) – Script required – 4 mg tablet

Dosage: 1/2 tablet two or three times a day.

Uses: Allergies, urticaria, miliary dermatitis and dry up nasal secretions in cats with the flu.

Side effects: Drowsiness, hyperexcitability, dry mouth, loss of appetite, diarrhea, vomiting, urinary retention.

Contraindications: Do not give to cats with glaucoma, urinary or gastrointestinal obstruction, high blood pressure, hyperthyroidism and heart disease.

Periactin (Cyproheptadine) – 4 mg tablet

Dosage: 1/2 tablet two or three times a day.

Uses: Antihistamine, appetite stimulant.

Side effects: Drowsiness, dry mouth, hyperexcitability, increased appetite, increased thirst and increased urination.

Contraindications: Do not give to cats with severe heart disease or urinary obstruction. Check with your veterinarian if your cat is pregnant or lactating.

Phenergan (Promethazine) – 10 mg tablet

Dosage: 1/2 tablet twice a day.

Uses: Allergies, anti-emetic (nausea), motion sickness, urticaria, eosinophilic granuloma complex.

Side effects: Drowsiness.

Contraindications: Check with your veterinarian if your cat suffers from asthma or other breathing disorders, glaucoma, seizures, high blood pressure, heart disease, liver disease, hypocalcemia is pregnant or lactating.

Polaramine (Dexchlorpheniramine) – 6 mg tablet

Dosage: 1 tablet twice a day.

Uses: Allergies, urticaria.

Side effects: Not available.

Contraindications: Not available.
Zyrtec (Cetirizine) – 10 mg tablet

Dosage: 1/2 tablet once a day

Uses: Allergies, urticaria.

Side effects: Vomiting, hypersalivation (drooling).

Contraindications: Consult your veterinarian if your cat has liver or kidney disease. Do not give to pregnant cats.

Antihistamine trials:

Your veterinarian may recommend a trial, to determine the most effective antihistamine for your cat. Initially, your cat may need cortisone and antihistamines, once symptoms improve, cortisone will be withdrawn. Antihistamines don’t cure allergies, however, the side effects are less severe than those of cortisone. Not all antihistamines will work with your cat or will produce undesirable side effects, so a trial will help to determine the best type for your cat.

An antihistamine is administered to your cat for ten days and his response is monitored. If there is no improvement, he move on to the next time of antihistamine until a suitable one is found.

Other ways to reduce allergies in cats:

Steroids are an effective drug to control pruritis and relieve symptoms. Injectable steroids will be used initially, these can last between 2-6 months. After that, your cat may be given oral steroids. Long-term use of steroids carry side effects, so your cat will either be weaned off if possible or kept on the lowest dose possible.

Use a reliable flea control programme too. See here for a list of flea control products for cats.

Omega-3 fatty acids are essential fatty acids (EFA’s) which cats must consume as they are unable to synthesize them. There are a number of omega-3 fatty acids, including ω-linolenic acid (ALA), docosahexaenoic acid (DHA) and eicosapentaenoic acid (EPA).

Fatty acids can reduce inflammation and the effects of histamine in cats with allergies. Not all cats will respond to omega-3 fatty acids, but they can be of help, especially when used with antihistamines.

Anti-itch shampoos and rinses to help relieve itching. Look for products containing oatmeal.