

# Integrative VETERINARY CARE

CLOSE-UP ON COLOSTRUM THIS "HIGH OCTANE" MILK OFFERS MORE THAN PASSIVE IMMUNITY WHEN USED AS A SUPPLEMENT FOR COMPANION ANIMALS. PAGE 20

# WESTERN HERBS TO ALLEVIATE ALLERGIES

How adaptogens, alteratives and dermatologic herbs work together to combat this common health issue.

# USING REIKI IN A SHELTER ENVIRONMENT

How this modality helps calm stress in shelter animals and makes them more adoptable.

# CHINESE HERBAL THERAPY FOR HORSES

Case reports and clinical trials may begin to provide a foundation for evaluating the use of Chinese herbs in Western practice.





# ESSENTIAL OILS AND CHINESE MEDICINE

Integrating the effects of these healing oils into a Chinese medicine approach gives you a powerful modality.

# HEAVY METALS AND EQUINE RENAL FAILURE

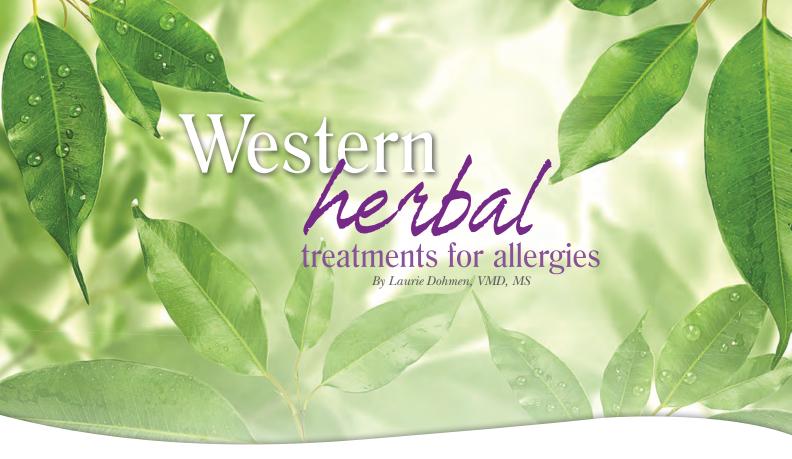
Explore the link between lead toxicity and the development of kidney failure in horses.

# WHAT'S NEW

- 3D prosthetics change a dog's life
- Grant program for integrative medicine
- Researching mitral valve disease
- Developing regenerative medicine therapies







Spring is here, and with it the reemergence of life and growth. With this positive rebirth, there is a downside - allergies.

Allergies can be triggered by either environmental pathogens or foods. Food allergies are (in my opinion) both easier and harder to treat - easier because a diet of exclusion (and in many cases a diet of fresh whole foods) removes the allergen; harder because client/patient compliance is low.

In this article, I will focus on environmental allergens since it is almost impossible to remove them. They include trees, plants, grasses, other animals, molds and mites (storage and dust).

Allergies are hard on the immune system; because they are a chronic disease, the immune system never gets a break. The immune system is comprised of two parts: the innate (ancestral) system and the adaptive (specific) system. The adaptive part is the one that causes allergies: it clears all environmental pathogens. "An unchecked and unbalanced immune system hampers good health and quality of life."1 We all know this to be true for allergy sufferers.

Allergies are an over-activated immune system<sup>1</sup> and an allergic response is an overreaction to a substance - "... an over-activated...immune response can cause chronic infection because of inefficient clearing of the pathogen or chronic inflammation due to inefficient resolution of the inflammatory response".1 I think everyone realizes that chronic inflammation is bad for the body.

Research is expanding on non-allopathic treatments for chronic inflammation. The majority of our immune system tissue is in the gastrointestinal tract, so keeping the digestion working optimally supports the immune system. Whole instead of processed foods support the digestive tract, immune system and most other bodily systems. Using whole foods, it is easy to incorporate nutraceuticals and other supplements into the diet. Some foods are naturally prebiotics, but adding a probiotic supplement is a good idea. Probiotics help the gut by making sure it is colonized with appropriate bacteria; they also reduce permeability, lower the synthesis of pro-inflammatory cytokines, and synthesize vitamins. Another good supplement to add is Omega fatty acids. They work to prevent allergic reactions.1

All this being said, I am primarily an herbalist, so I use Western herbs to support the immune system and prevent allergies. "Herbal medicines reportedly affect cytokine secretion, histamine release, immunoglobulin secretion and class switching, cellular co-receptor expression, lymphocyte proliferation, and cytotoxic activity," writes NIH AIDS researcher Susan Plaeger in a "Guest Commentary" for Immunology and Herbs. "Herbal treatments decreased antigenspecific immunoglobin E, as well as interleukin-4 (IL-4), IL-5, and IL 13 secretion from spleen cells, but did not suppress immunoglobulin G2a and gamma interferon synthesis."2

### **ADAPTOGENS**

One of my favorite classes of herbs for immune support is adaptogens. In 1969, Russian doctor Israel Brekhman defined "adaptogen" as follows:

"(a) An adaptogen should be innocuous and cause minimal disorders in the physiologic functions of an organism;

(b) The action of an adaptogen should be nonspecific, i.e. it should increase resistance to adverse influences of a wide range of factors of physical, chemical, and biological nature;

©An adaptogen may possess normalizing action irrespective of the direction of the foregoing pathologic changes."3

Part "a" demands that adaptogens are safe for long term use, part "b" clearly includes allergens, and part "c" means that adaptogens work whether there is immunocompromise or overstimulation, as with allergies. Some of my favorite adaptogens include eleuthero (Eleuterococcus senticosus), ashwaganda (Withania somnifera) and astragalus (Astragalus membranaceous).

> • Eleuthero, also known as Siberian ginseng due to its similarity to true ginseng, is known for its ability to 🚄 increase resistance to all stressors. One of the many ways it does this is by supporting and enhancing y the immune system. In fact, there are many studies in which eleuthero prevented people from getting common diseases.2 It is known as a preventive

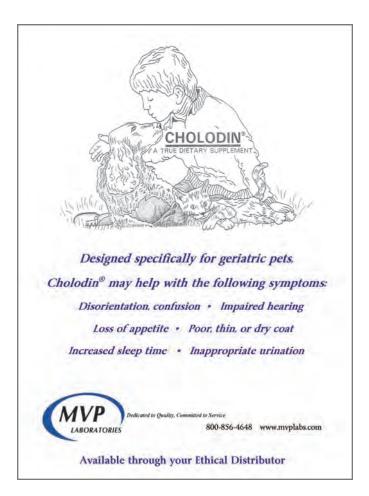
rather than a curative herb. It helps prevent the symptoms and secondary infections often associated with allergies. True ginseng (Panax ginseng/quinquefolius) is wonderful, but not effective until the plant has been growing for at least six years. Roots that old are almost impossible to find in the US, and they are prohibitively expensive worldwide.

> Ashwaganda is another good adaptogen. It is immunemodulating, restorative for chronic illnesses (such as allergies) and a tonic for the adrenals. It is especially indicated for the geriatric population, who have a harder time mounting an immune response under the best of circumstances.

• Astragalus is similar to ashwaganda, but for the young instead of the old. It increases energy and resistance to disease, and strengthens and stimulates the immune system. Unlike eleuthero, which is more

> preventive, astragalus can both prevent and treat infections, so it is a great adaptogen for animals whose allergies have progressed to dermatitis or otitis. According to David Hoffmann, "Astragalus appears to strengthen both nonspecific [innate] and specific [adaptive] immunity...it strengthens many functions of the immune system."4

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## **ALTERATIVES**

Another class of herbs I find very beneficial for allergies are alteratives, which are blood cleansers. According to Rosemary Gladstar, alteratives are "agents that gradually and favorably alter the condition of the blood. They aid the body in assimilating nutrients

and eliminating metabolic waste products."<sup>5</sup> Since toxins are primarily cleared from the blood in the liver and kidneys, most alteratives have liver or kidney effects. Some good alteratives include burdock (*Arctium lappa*), dandelion (*Taraxacum officinale*), nettle (*Urtica dioica*) and cleavers (*Galium aparine*).

• I put burdock in almost every formula I make. Not only is it an alterative, but it's a food herb (gobo), so it is nourishing, cleansing and supports the liver and kidneys. According to Andrew Chevallier, "Burdock is one of the foremost detoxifying herbs...used to treat conditions caused by an 'overload' of toxins, such as...chronic skin problems."

Both my cats and my dog love "nettle eggs" (always some variation of an omlette with nettles, mushrooms, garlic and cheese). Its Latin name is *Urtica*, from which comes "urticaria", so it stands to reason that this is a good herb for treating allergies. Hoffmann says that "the herb strengthens and supports the whole body. Throughout Europe, nettle is used as a spring tonic and general detoxifying remedy."<sup>4</sup>

Burdock



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### SPECIFIC DERMATOLOGY HERBS

Lastly are the herbs for dermatologic conditions, which is how most allergies in small animals manifest. In this category, I like to use Echinacea (Echinacea purpureal angustifolia), licorice (Glycyrrhiza glabra) and Oregon grape root (Mahonia aquifolium).

- We all know Echinacea as an antimicrobial herb, but it does so much more. It is an immune stimulant (this is how it fights microbes), but it can also fight allergens this way. It also is an anti-inflammatory and a mild detoxifier. Chevallier states that "Echinacea is one of the world's most important medicinal herbs. Research shows that it has the ability to raise the body's resistance... by stimulating the immune system. Echinacea...helps to relieve skin allergies, and it has been used for centuries to clear skin infections." Unlike adaptogens and alteratives, Echinacea is not good for long-term use. There is debate about its safety long-term, but there is no debate that it loses its efficacy over time, and should therefore be pulsed (two weeks on, two weeks off).
- Licorice is another herb that cannot be used long-term, due to its adrenal effects. However, it is an anti-inflammatory and soothing herb, as well as being healing and detoxifying to the liver. Its adrenal effects make licorice good for allergies: it is nature's hydrocortisone. The adrenal support also helps the body deal with the stress the allergens put on the entire system. In one study, "the results showed that licorice extract could be considered as an effective agent for treatment of atopic dermatitis".8

• Oregon grape root, native to the Pacific Northwest, is specific to chronic skin conditions. It also is an alterative, a stimulant and a tonic to the liver and gall bladder. Despite its berberine content, Oregon grape root is

considered a very safe herb. Wynn and Fougere recommend it for both skin and ear infecions.<sup>9</sup>

Whenever allergies flare, I use nutrition (I think whole foods are vitally important to good health), supplements and herbs to keep the animal comfortable and healthy until the allergen has waned in the environment. I use a combination of adaptogens, alteratives and dermatologic herbs tailored to the individual patient. One dog named Riley loved his combination so much that his owner always used to say he sat and begged for it! As I have found with Riley and many other animals, good herbal treatment and whole foods can help completely resolve environmental allergies. The animals can remain allergy-free due to their boosted immunity.



Licorice

<sup>3</sup>Brekhman I, Dardymov I. "New substances of plant origin which increase nonspecific resistance". *Annual review of pharmacology*, 1969; 9(1), 419–430.

<sup>4</sup>Hoffmann D. *Medical Herbalism*. Rochester: Healing Arts Press, 2003.

<sup>5</sup>Gladstar R. *The Science and Art of Herbalism: A Home–Study Course*. East Barre: Sage Mountain.

<sup>6</sup>Chevallier A. *The Encyclopedia of Medicinal Plants*. London: Dorling Kindersley Limited, 1996.

<sup>7</sup>Gladstar R. *Rosemary Gladstar's Family Herbal*. North Adams: Storey Books, 2001.

<sup>8</sup>Saeedi M, Morteza-Semnani K, Ghoreishi M. "The treatment of atopic dermatitis with licorice gel". *Journal of Dermatological Treatment*, 2003; 14, 153–157.

<sup>9</sup>Wynn S, Fougere B. Veterinary Herbal Medicine. St. Louis: Mosby Elsevier, 2007.

Echincaea

<sup>&</sup>lt;sup>2</sup>Plaeger S. "Clinical Immunology and Traditional Herbal Medicines". *Clinical and Diagnostic Laboratory Immunology*, 2003; 10 (3), 337–338.