

Mistakes That Compromise Your Pet's Immune System

It's called the 'Great Protector.' But tip the scales one direction or the other, and your pet will likely pay for the indiscretion. Find the balance with these four ways to boost your pet's immune harmony, and their opposites that wreck immune function in a hurry.

Reviewed by [Dr. Becker](#)

STORY AT-A-GLANCE

- The job of your pet's immune system is to protect the body from foreign pathogens
- A healthy, functioning immune system is one that is balanced – neither underactive nor overactive
- Many things can disrupt the healthy functioning of your dog's or cat's immune system, including disease, chronic stress, medications, and vaccines
- To help maintain a balanced immune system, focus on diet, exercise, therapeutic massage, and reducing your pet's toxic load

Editor's Note: This article is a reprint. It was originally published October 25, 2015.

The immune system is sometimes called "the great protector." The word immune comes from the Latin word "immunis," which means "free" or "exempt." Your pet is immune if he or she is protected against a specific disease by inoculation or as a result of innate or acquired resistance.

The immune system is comprised of a diffuse, complex network of interacting cells, cell products, and cell-forming tissues that protect the body from pathogens and other foreign substances, destroy infected and malignant cells, and remove cellular debris.

The immune system includes the thymus, spleen, lymph nodes and lymph tissue, stem cells, white blood cells, antibodies, and lymphokines. Lymphokines are a subset of cytokines produced by a type of immune cell called a lymphocyte.

The Importance of a Balanced Immune System

The job of the immune system is to respond appropriately to infectious agents from the outside world. An appropriate response is when the immune system mounts a defense against an outside challenge without destroying the body. This requires that the immune system knows the difference between its "self" (your pet's body) and the foreign invader.

Every cell and organ system in your pet's body has its own mechanisms of immunity, and each also has some sort of interdependent, inner regulator. Recent studies show that an animal's emotions have a tremendous effect on immunity, both positive and negative. Environmental influences including noises, odors, light patterns,

and environmental pollutants can also dramatically affect the immune system.

While Western medicine views the immune system as individual pieces separate from the whole, from a holistic point of view, the most important aspect of the immune system as a whole is that each individual component of immunity is interconnected and that all the parts of the system are in constant communication with all of the other parts. This is the inner communication that is the focus when we take a holistic approach to a pet's wellness.

While Western medicine focuses on just one component of a disease, the goal of a holistic approach is to integrate all of the components of the immune system to bring them back into balance.

Actually, balance is the key word. The importance of a balanced immune system is vital, because an imbalance in either direction — meaning the immune system is either underactive or overactive — will ultimately lead to disease in the body.

Immune System Disruptors

There are many ways normal immune function can be disturbed or suppressed. Many diseases, especially those created by viruses, can directly attack the cells of the immune system. They can also be subtler in their assault, slowly invading one or more components of the immune system, decreasing its overall effectiveness.

Chronic, long-term, and unavoidable stress will, over time, overwhelm the ability of the immune system to respond, which makes the animal more susceptible to disease. Interestingly, short-term moderate stress has been shown to enhance the immune response. Short episodes of stress that work the immune "muscles" to make them stronger can actually prepare the animal's body to respond appropriately to challenges such as infections or injuries.

Antibiotics can, on one hand, assist the immune system by killing off pathogenic bacteria. But at the same time, they also destroy much of the protective mechanisms by killing off the friendly bacteria that live in an animal's gut, on his skin, and in other parts of the body.

Corticosteroids such as prednisone are often used to suppress a hyperactive immune system response, but overuse or long-term use of these drugs can actually render the immune system unable to function at all.

Vaccines stimulate the immune system so that it will be ready to mount an attack at some later time against a specific disease. But vaccines can also over-stimulate the immune system to the point of anaphylaxis, which is a life-threatening adverse reaction.

More often, repeated vaccinations exceed the immunological threshold of some animals, resulting in autoimmune disease (also called immune-mediated disease), where the animal's immune system becomes confused and attacks itself.

Categories of Immune System Disorders

Most holistic veterinarians believe that just about every disease an animal acquires is directly linked to an immune system imbalance of some kind. Anaphylaxis, which is called a Type I reaction, describes any acute, systemic, and hyperactive immune response to triggers such as an insect bite, a vaccine, drugs, food, or less often, blood products during a transfusion.

Other immune-mediated diseases, called Type II reactions, involve the production of antibodies against the cells of the animal's own body. In other words, the immune system doesn't recognize its "self." It can be difficult to know what triggers an autoimmune response, but it is often related to the administration of drugs or vaccines, as well as environmental toxins.

Two of the most common Type II autoimmune diseases are autoimmune hemolytic anemia (AIHA) and autoimmune thrombocytopenia. Myasthenia gravis is another immune-mediated disease in which the body attacks its own muscle cells.

Type III autoimmune reactions occur when an animal's body produces antibodies that interfere with the normal function of different areas of the body. Examples include canine rheumatoid arthritis, systemic lupus erythematosus (SLE), and a kidney disease call glomerulonephritis.

Type IV reactions involve cell-mediated components of the immune system, and include contact sensitivity, autoimmune thyroid disease, and keratoconjunctivitis sicca (dry eye). These are all examples of **hyper**active immune system responses.

At the other end of the spectrum is the **hypo**active (underactive) immune system response, which can be caused by a viral infection, a genetic disorder such as IgA deficiency, poor nutrition, and a stressful or toxic environment.

Suggestions for Maintaining Your Pet's Immune Health

A healthy immune system is a balanced immune system, and there are a number of things you can do as a pet owner to maintain your dog's or cat's immune health.

- **Exercise has direct benefits for your pet's immune system** — When your dog or cat works her muscles, it helps cleanse the body of toxins and keeps the lymphatic system working well.
- **Massage increases lymphocyte numbers and enhances their function** — Massaging your pet also relaxes her, which is good for her emotional health and therefore, her immune health.
- **Keeping your pet at an ideal body weight is also very important** — A species-appropriate diet will help manage inflammatory responses, which in turn will improve your dog's or cat's immune function. The more antioxidants you can offer your pet through whole food nutrition, the better. This is impossible to do if you're feeding an entirely processed diet in the form of dry or canned pet food.

Animals have very high antioxidant requirements, and you really have only two options for meeting those requirements. You can either provide a synthetic vitamin and mineral supplement (which is how processed pet food manufacturers do it), or you can provide whole food nutrition.

To be vibrantly healthy, animals need lots of unprocessed, living, and fresh foods to meet their antioxidant requirements, which include vitamin A, all the B vitamins, vitamins C and E, zinc, selenium, and vitamin D. Fresh meats and organs, herbs, and organic, non-genetically modified (GM) vegetables are excellent natural sources of the vitamins and antioxidants your pet needs for a balanced, healthy immune system.

- **Reducing the amount of chemicals that are in, on, and around your pet is also important for maintaining a functional immune system** — The toxins in an animal's immediate environment play a huge

role in creating immune system dysfunction.

Offering fluoride- and chlorine-free water is very important, as is toxin-free air. Minimizing vaccines and topical pesticides found in flea and tick preventives is also important.

Avoiding all sources of environmental toxins is nearly impossible, so putting together a detox protocol for your dog or cat is a good idea.

Holistic veterinarians have long recognized the importance of a balanced immune system. They have lots of tools to help re-balance an underactive or overactive immune system. Try to partner with a vet who prioritizes the health of your dog's or cat's immune system.
