



preventing CANINE CANCER

by: Deva Khalsa DVM

For loving dog owners, cancer is the most feared disease. In the United States, cancer is the primary cause of death in dogs over two years of age. That's truly significant. Unless the mass is bulging out noticeably from the skin, most cancer grows invisibly, inside the body. Most of the time, routine blood tests are normal. That's why it's called the silent killer.

The potential for cancer begins when carcinogens damage and alter the DNA in a cell. The damaged DNA sits and waits, like a seed on the ground waiting for water, until the conditions that promote the creation of a cancerous cell are just right. When a cancerous cell starts to divide, your dog has a built-in mechanism to destroy the cell and force it to self-destruct. The tumor-suppressor gene p53 monitors the biochemical signals in cells that indicate DNA mutation and division is in progress. The p53 gene instructs the cell to either halt the growth cycle or self-destruct. Exposure to toxins and viruses (and in some cases, genetic predisposition), can damage the p53 gene, limiting its ability to protect the body from cancerous cells.

Once cancer gets a toehold, each type has its own special behavior. Some excrete substances that help them hide from the immune system while others encapsulate themselves and become what could be considered as something akin to an individual life form. Some forms are very aggressive while others grow slowly. The type of cancer your dog has should determine the treatment protocol you choose. I'll be going over this in detail in a future article.

With every passing decade, the number and concentration of carcinogens our dogs are exposed to escalates. Nowadays, exposure to toxins and carcinogens is unavoidable. While it's impossible to avoid every carcinogen, we can certainly work to decrease our pets' exposure to these toxins.

It's important to learn about what's in the environment and how we can avoid carcinogens. One way is to simply not buy and use carcinogenic products on our dogs. Dr. Dobozy of the Environmental Protection Agency's (EPA's) pesticide division states that one of the laboratory effects of fipronil in Frontline is thyroid cancer and altered thyroid hormones. While the company creates the impression that their product does not migrate into the body, radio-labeled fipronil was found in several organs and in the fat of tested dogs and was also excreted in their urine and feces.

Bio Spot Flea and Tick Control, Defend Exspot Treatment and Zodiac FleaTrol Spot On all contain one or both of the active ingredients Permethrin and/or Pyriproxyfen. Permethrin has been implicated as a carcinogenic insecticide causing lung cancer and liver tumors in laboratory animals. Exposure to a carcinogen typically occurs many years before the cancer appears. Often times it never escalates into a cancerous growth. Imagine how potent the carcinogens are that create cancer within several months in a laboratory setting.

I mention the above commonly used products in relation to cancer. This does not mean that the numerous products I am not mentioning are safe - unfortunately. According to the Center for Public Integrity, who collected information through the Freedom of Information Act, the pyrethrins (naturally occurring compounds from the chrysanthemum plant) and pyrethroids (the synthetic counterpart) caused double the fatalities (1,600) from 2002 to 2007 than the non-pyrethroid compounds.

To reduce our dogs' risk of cancer, the first thing we can do is find a good natural product to repel those pesky fleas and ticks, and minimize or eliminate the use of these toxic insecticides. We can then expand our horizons to lawn chemicals, weed killers, herbicides and

cleaning agents. Take it upon yourself to research dryer sheets and room deodorizers on the web and you will discover their cancer causing ingredients. I think you'll be very surprised. If I went into all the carcinogens that we expose ourselves and our dogs to on a daily basis, this would be a very long and depressing article.

But there's more. A growing body of research is implicating early spaying and neutering in increasing cancer rates. In a 2002 study, it was established that there was an increased risk of osteosarcoma in both male and female Rotweilers sterilized before the age of one year. In another study, it was shown that the risk of bone cancer in sterilized large purebred dogs was twice that of dogs that were not neutered.

Apart from cancer, research indicates that the removal of the sex organs in both male and female dogs at an early age can cause growth plates to remain open. Additionally, a study at Cornell showed that both male and female dogs neutered at an early age were more prone to hip dysplasia.

Some good news: there's now a test that can check cancer markers in dogs. Onco Pet Diagnostic Service for Cancer in the Canine has launched a new test that can detect the presence of cancer with approximately 90% sensitivity and 95% specificity. That's impressive. According to the company, it's not costly and it's accurate. Many veterinarians are using these tests already or are participating in the studies. <http://www.oncopetdiagnostics.com/>

Owners of female dogs are advised to spay their pups before the first heat in order to avoid mammary cancer. In my 30 years of practice I have never seen one of my patients who follows holistic care get mammary cancer although I did get many cases of mammary cancer as their first visit. Additionally, I have never clinically found neutering to lower the risk of prostate cancer in male dogs. The College of Veterinary Medicine at Michigan State University did a small study in which they stated the same. Urinary incontinence, hypothyroidism and a host of behavior problems have also been associated with early neutering.

While some cancers are caused by carcinogens, others are caused by viruses. It has long been known that the Feline Vaccine Associated Sarcoma is a malignant tumor, associated with the FeLV vaccine and Rabies vaccine injections, occurring at the site of injection. Veterinary students are now being taught to inject these vaccines into a cat or kitten's hind leg, so the leg can be amputated if a tumor appears.

When your dog gets vaccinated, you are getting much more than you pay for. Both killed and live viruses that cause diseases in other species often contaminate the vaccine broth, which leads into the following true story. Parvovirus was an unknown disease until about 1980. Then it broke out at the same time in Japan, England and the United States. The Feline Panleukopenia Virus had been a con-

taminant within the canine combo vaccine for some time. In 1980 it jumped species, changing and infecting dogs with the new disease called Parvovirus. In fact, during the initial outbreak, veterinarians were using the Feline Panleukopenia Vaccine to protect dogs from the new disease. It would be just as easy for viruses that cause cancer in cats to, once again, jump species and create cancer in dogs. Who knows, perhaps this is happening already.

Some of the steps you might want to take to help reduce the risk of cancer in your dogs are:

1. Reduce the use of flea and tick products and find natural substitutes like Ticked Off.
2. Maintain your lawn and grounds with minimal or non-toxic herbicides, insecticides and chemicals.
3. Learn more about the detergents, fabric softeners, soaps and cleansers that you use and begin to use products that do not contain carcinogens.
4. If you must alter your dog, don't spay or neuter too young. I would recommend waiting until a year or a year and a half of age.
5. Eliminate or minimize vaccinations as much as possible. Vaccine titers from a blood sample are readily available if you want to make sure your pup has immunity.

Fortunately for our dogs, these precautions are not so difficult to carry out. But these steps only decrease the carcinogens that you have control over: you can never eliminate every environmental carcinogen your dog might be exposed to. This is why it is important to learn more about the nutritional 'tricks of the trade' for preventing cancer. What ingredients in dog foods should you avoid? What foods effectively help prevent cancer? How do these special foods accomplish this?

Foods to avoid and foods that help prevent cancer will be the subject of the next article.



Since beginning her holistically oriented veterinary practice over 25 years ago, Dr. Khalsa has been incorporating homeopathy, acupuncture, Chinese Herbs, nutritional advice, allergy-elimination techniques such as N.A.E.T and also J.M.T. into her approach. Today her work is a blend of sophisticated holistic techniques and traditional veterinary medicine designed to best enhance the natural strengths and attributes of her patient. Dr. Khalsa coauthored 'Healing Your Horse: Alternative Therapies' (Howell Book House, 1993), and most recently authored 'Dr. Khalsa's Natural Dog' (Kennel Club Books, 2009), a book best described as a 'holistic bible' for dog owners. Dr. Khalsa is a Fellow and Professor of the British Institute of Homeopathy. She has lectured both nationally and internationally.



The Honest Kitchen was founded in the kitchen of a San Diego beach cottage in 2002, out of frustration with a lack of healthy pet food options. With an honest mission of creating wholesome pet foods, they've bridged the gap between highly processed kibble, and homemade foods, with a unique diet that has touched the lives of thousands of pets.

Dehydration De-mystified

The Honest Kitchen's foods are dehydrated to remove the water from fresh, raw ingredients. Dehydration harnesses the power of whole foods and makes a really healthy, compact product that's lightweight, and free of artificial preservatives. Simply add the water back when you're ready to serve each meal.



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